

THE NATION'S SCHOOLS



FEBRUARY

Instructional leadership comes first

Some hunches on teacher morale

Superintendent's day hasn't changed much

School lunch provides teaching opportunities

Classroom teachers discuss merit rating

School nurse is also a teacher

Flexible grouping within the classroom

The lives you save by driver training

The little things in schoolhouse planning

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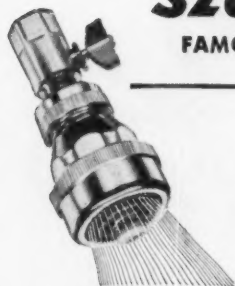
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FEBRUARY 1957

ARTICLES

Instructional Leadership Comes First.....	43
JAMES H. WILLIAMS	
Designing a School for Physically Handicapped.....	45
FRANCES A. MULLEN	
School Lunch Provides Many Teaching Opportunities.....	49
G. ROBERT KOOPMAN	
Studies on Teacher Morale and Quality of Education.....	53
FREDERICK L. REDEFER	
The Lives You Save by Driver Training.....	56
Interviews With WAYNE P. HUGHES and ROYAL S. BROWNE by DOLORES E. HENNING	
The Superintendent's Day Hasn't Changed Much—or Enough.....	60
ERNEST C. HARTWELL	
School Nurse Is Part of School Program.....	63
GERTRUDE E. CROMWELL	
What to Do About Winter Vacations.....	82
GEORGE PROPECK	
What Classroom Teachers Say About Merit Rating.....	83
ROBERT A. SKAIFE	
Chalk Dust	86
FREDERICK J. MOFFITT	
Legal Limitations on Issuing School Bonds.....	87
LEE O. GARBER	
Grouping Can Be Flexible Within the Classroom.....	89
WALLACE H. STREVELL and PAULINE OLIVER	
How Should Public Schools Celebrate Holidays?.....	92
OPINION POLL	
The Superintendent's Task: Improving Instruction.....	120
A.A.S.A. Yearbook Review by C. C. TRILLINGHAM	
Teachers for Our Times.....	128
Book Review by MARCUS BACH	

SCHOOLHOUSE PLANNING

Monument to Reawakened Pride.....	66
ROBERT B. SHONFELD	
It's the Little Things That Count.....	74
ROBERT D. MORROW	

BUSINESS ADMINISTRATION

Staffing, Directing and Evaluating.....	96
HAROLD T. PORTER	

AUDIO-VISUAL

Putting Light Control Into the Plans.....	106
WALTER A. WITTICH	

THE SCHOOL LUNCH

Three Methods of Classroom Feeding.....	114
MARGARET E. TERRELL	

REGULAR FEATURES

Among the Authors.....	4
Administrator's Clinic.....	6
Questions and Answers.....	8
Reader Opinion	10
Roving Reporter	12
Looking Forward	41
Wire From Washington.....	130
News in Review.....	138
About People.....	166
The Bookshelf.....	170
Coming Events.....	174
What's New for Schools.....	177
Index of Advertisers.....	op. 210

AMONG THE AUTHORS



James H. Williams

Is the effective administrator automatically an educational leader? Not necessarily, says JAMES H. WILLIAMS, and he develops this thesis on page 43. Dr. Williams began his educational career as a teacher and school administrator in Texas. After a navy stint during World War II he became assistant superintendent of schools in Alameda County, Oakland, Calif., and then moved to Richmond, Calif., as deputy superintendent of schools. Since January 1955 he has been superintendent of schools at Glendale, Calif.

The school nurse today is both educator and nurse. On page 63 GERTRUDE E. CROMWELL, supervisor of nursing for public schools in Denver, tells how school nurses there function as members of the educational team. Miss Cromwell began her career as a teacher in Pennsylvania, later becoming a school nurse in New York. She has taught hygiene at Teachers College, New Paltz, N.Y., Wells College, Aurora, N.Y., and State Teachers College, West Chester, Pa., where she was also assistant dean of women. Before going to Denver, Miss Cromwell was supervisor of health education and school nursing in Des Moines, Iowa. She is a past president of the American School Health Association and has been assistant editor of the association's journal since 1946. In 1953, the association conferred upon her the William How Award for distinguished contributions to school health. She is the author of "Health of the School Child," published in 1946.

Originally a space saving expedient, the classroom lunchroom has achieved recognition in its own right, says MARGARET E. TERRELL (p. 114). Dr. Terrell has been associated with the University of Washington since 1928, when she was appointed instructor in home economics and director of residence and dining halls. She still holds the latter position and is now professor of home economics and director of the administrative dietitian training course at the university. Under the "hobby" category, Miss Terrell notes that she is the owner of Terrell Dining Service, which includes four industrial lunchrooms and a commercial restaurant! She is not a stranger to the public schools, having served as principal and superintendent in two Iowa school systems.

Merit rating—from the point of view of the classroom teacher—was the subject of a study conference sponsored by the N.E.A.'s Department of Classroom Teachers last fall. ROBERT A. SKAIFE summarizes the discussions and

recommendations of the group on page 83. As N.E.A. field representative for the office of the assistant executive secretary for field operations, Dr. Skaife works with field workers of state teachers associations, promotes N.E.A. membership, and travels extensively, interpreting the N.E.A. and its services. Before taking this position in 1955, he was field secretary for the N.E.A.'s National Commission for the Defense of Democracy Through Education. Earlier in his career, he taught in Massachusetts and was principal of schools in Vermont and Maryland.

Eat to learn—or learn to eat? It's the latter that should be the primary emphasis in the school lunch program, says G. ROBERT KOOPMAN (p. 49). As associate state superintendent of public instruction, Dr. Koopman has been associated with the Michigan curriculum program since its beginning in 1935. In March he will begin his term of office as president of the Association for Supervision and Curriculum Development of the N.E.A., having already served on A.S.C.D.'s board of directors for two three-year terms. During his years in education, Dr. Koopman has served as teacher, principal, supervisor and superintendent. In 1951-52 he held the position of chief of the education and cultural relations division in the Office of the U.S. High Commissioner for Germany, while on leave of absence from his Michigan post.



G. Robert Koopman

What grouping practices do your classroom teachers use? WALLACE H. STREVELL and PAULINE OLIVER have turned up 24 varieties; on page 89 they discuss the values of flexible grouping. For the last five years Dr. Strevell has been professor of education and chairman of the department of administration and supervision in the University of Houston College of Education. In 1953 he organized the Gulf School Research Development Association, which provides research and service for member school systems in the Texas Gulf Coast region; he also serves as director of that association. Currently, Dr. Strevell is on leave of absence from his university post, doing a school finance study with the New York State Department of Education. Before going to Texas, he had held administrative and consultant's positions in New York State schools. . . . Mrs. Oliver is a research fellow in the college of education, University of Houston, and managing editor of the *Gulf School Researcher*. She was research assistant to the study commission on pupil grouping of the Gulf School Research Development Association, which reported the study of grouping practices discussed in the article.



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Curtain going up on administration's big show . . . School systems need overhauling . . . We are measured by results

By CALVIN GRIEDER, professor of school administration, University of Colorado

Biggest Show on Earth. The curtain is about to be rung up on the biggest show on earth in educational administration—the A.A.S.A. convention at Atlantic City, N. J.

It would be easy to understand how school administrators could get the idea from this array of exhibits, speeches and panels that administration is the alpha and omega of public education. Undoubtedly some are bemused into exaggerated opinions of their own importance. For others whose ego has been bruised a bit in the ceaseless battles on the home front, the therapeutic effect of this great conclave is undeniable. One gets a much needed lift from being a part of this massive convention and from talking with professional colleagues from all parts of the country.

Without intending to throw a single drop of cold water on the proceedings, I want to express the hope that in the supercharged atmosphere of the Atlantic City meeting we will remember that administration is not an end in itself. It is ancillary to the central task of instruction and must be judged by how well it promotes creative, efficient and productive teaching.

Need for Overhauling. Since 1940 unprecedented growth has occurred in city school systems, and there is no sign it will level off in the near future. This development demands that administrative organization be rigorously examined and steps taken, if necessary, to make it accord with the current situation.

If a city school system has not overhauled its administrative setup within the last five to ten years, it is almost a certainty that its administration is working under handicaps of inadequate staff and cumbersome structure.

One tendency in a period of expansion is failure to appoint additional

staff members to keep pace with growing demands. This results in gradually increasing overloads for the staff and the neglect of work that should be done. Another tendency, where some effort is made to keep pace, is to create new bureaus and appoint some new staff members with little regard for fitting these new elements into the total pattern. In general, educational administration at all levels, from the elementary school to the university, is understaffed, and in large school systems and institutions it is also in need of streamlining.

As one approaches the study of administrative reorganization, a thoroughgoing review of the work to be done and of the present structure and staffing should be the first step. Then an attempt should be made to group related areas of work under a few top-level administrators. In a city school system these may be designated as associate or assistant superintendents and directors. The superintendent of schools should work closely with a relatively small number of persons.

Some suggested major divisions are curriculum and instruction, business affairs, personnel (certificated and non-certificated), school census and attendance, research (educational, business and finance, school plant development), and community services. The superintendent should have at least one administrative assistant, and the person in charge of public information may well be assigned to him also.

Appropriate bureaus should be created for each major division. For example, in the division of business affairs, there may be bureaus for budgeting and accounting; payroll; supply purchase, storage and distribution; food service and insurance. In the division of curriculum and instruction, appropriate subdivisions would be elementary education, secondary education,

adult education, special education, and perhaps vocational education, although in my opinion this should not be segregated.

The staff concept can be implemented by assigning specialists to each major division or to subdivisions, not in the line of control but for expert guidance and assistance. This is best illustrated in the division of curriculum and instruction by reference to audio-visual instruction, physical education, music, art and other subject areas. Incidentally, there seems to be a trend toward vertical or integrated supervision embracing all grades, elementary and secondary.

Coordination should be provided for by committees and councils cutting across major divisions. The lines of cooperative effort are so numerous in the complex operations of a city school system that they cannot be shown on one chart.

The study of administrative structure and staffing is a most interesting and worth-while professional project. It is easy to get into a rut and to follow the line of least resistance. The alert and professionally competent administrator guards against this by periodic analysis before conditions get too bad.

Expert and objective help can be procured at little or no cost from state education departments, leading universities, and, although at considerably more expense, private consultants. As a rule, modernization will increase the budget, but not much in terms of percentage. Such increases can be justified in terms of work loads, increased efficiency, better educational service.

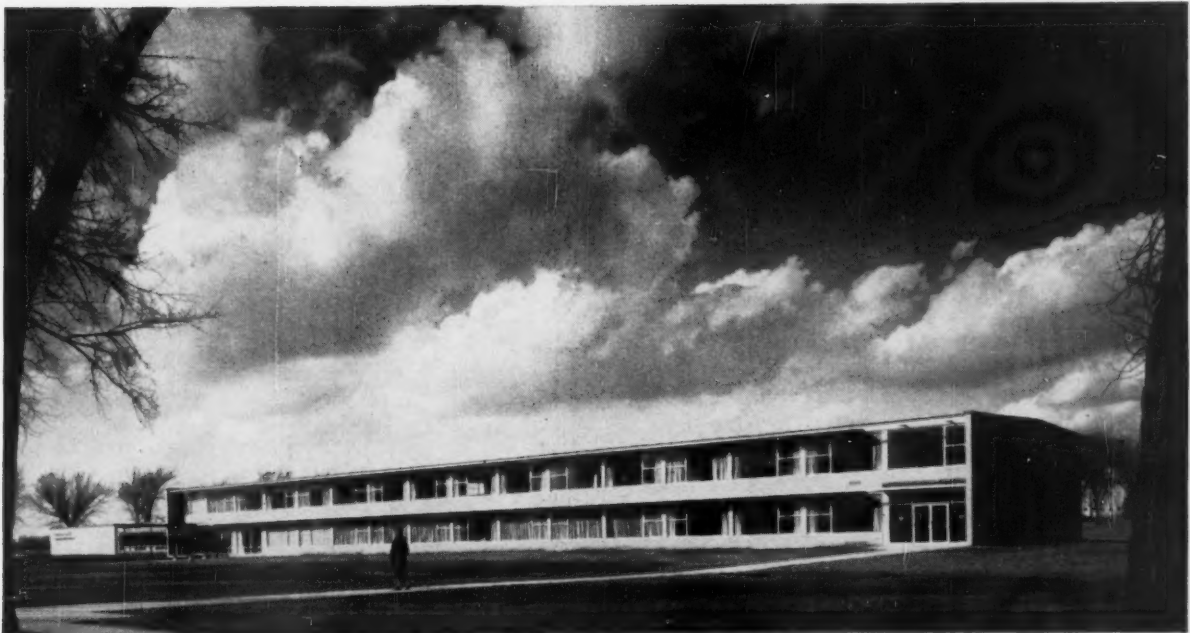
"We are measured by our results."

Recently I read a statement of one man's philosophy which I want to pass on to readers of *THE NATION'S SCHOOLS* as particularly appropriate for schoolmen. Robert Moses, who has given a lifetime of eminent service to the public, expresses the belief by which he has been guided in these characteristically forthright statements, quoted in *Harper's Magazine* for December 1956:

"We cannot afford to waste the short span allotted to us on lost causes. We cannot hope to please everybody. We must labor in the public vineyard with the tools, the resources, the men, and the support we can muster in our time. We are finally measured by our results, not by our pretensions." (Continued on Page 8)

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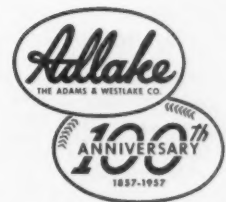
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Administrator's Clinic, Cont.

It would be hard to improve on those four sentences for a succinct expression of the school administrator's philosophy. I believe that many good proposals for educational advance are deferred because we are prone to think that "the time is not ripe." The ripe time never comes—NOW is the only time.

It may be granted that the timing of changes must be taken into account in administration. However, one cannot forever go on preparing the seed-bed or waiting for the auspicious

conjunction of circumstances. Waiting for the time to be ripe is a passive attitude that does not comport with the active leadership inherent in the very term "administrator."

Questions and Answers

Contract Painting

Do school systems in general have their painting jobs done by contractors, or are they handled largely by their own crews? Last summer our paint schedule bogged down, and

we were forced to hire temporary painters to supplement our own crews. We are wondering if we would not have been smarter to have had such a big job done under contract.

Surveys show that most school systems have exterior painting jobs done under contract and use their own paint crews to handle interior work.

If the schedule is heavy for a particular season, as was yours last summer, it is probably better to call in contractors. To supplement your normal painting crew by more than 50 per cent would probably not be economical, especially if you have only a limited amount of equipment.

It may be wise to get bids on all buildings that appear on the annual schedule. Some contractor fairly new in the territory may be eager for a trial job and send in a low bid. Other contractors will bid lower than usual to pick up small fill-in jobs to keep their large organizations busy. This may give your school system a decided advantage, although you will not necessarily accept the lowest bid. You must know your contractors and have some knowledge of the quality of their performance; otherwise bids may be meaningless.

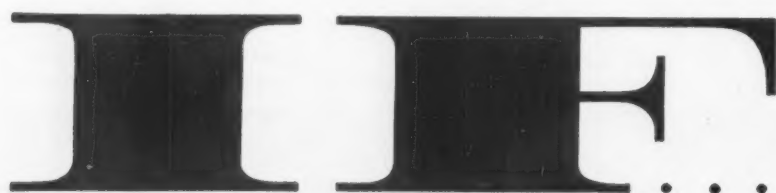
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4. All materials stored on the premises shall be stored in the rooms designated. Oily rags, waste, dirty overalls, drop cloths, and the like shall be stored in metal containers with clamp or friction lids or removed from the building every night. All waste material shall be dumped outside the building in refuse receptacles and removed each day. (Continued on Page 10)



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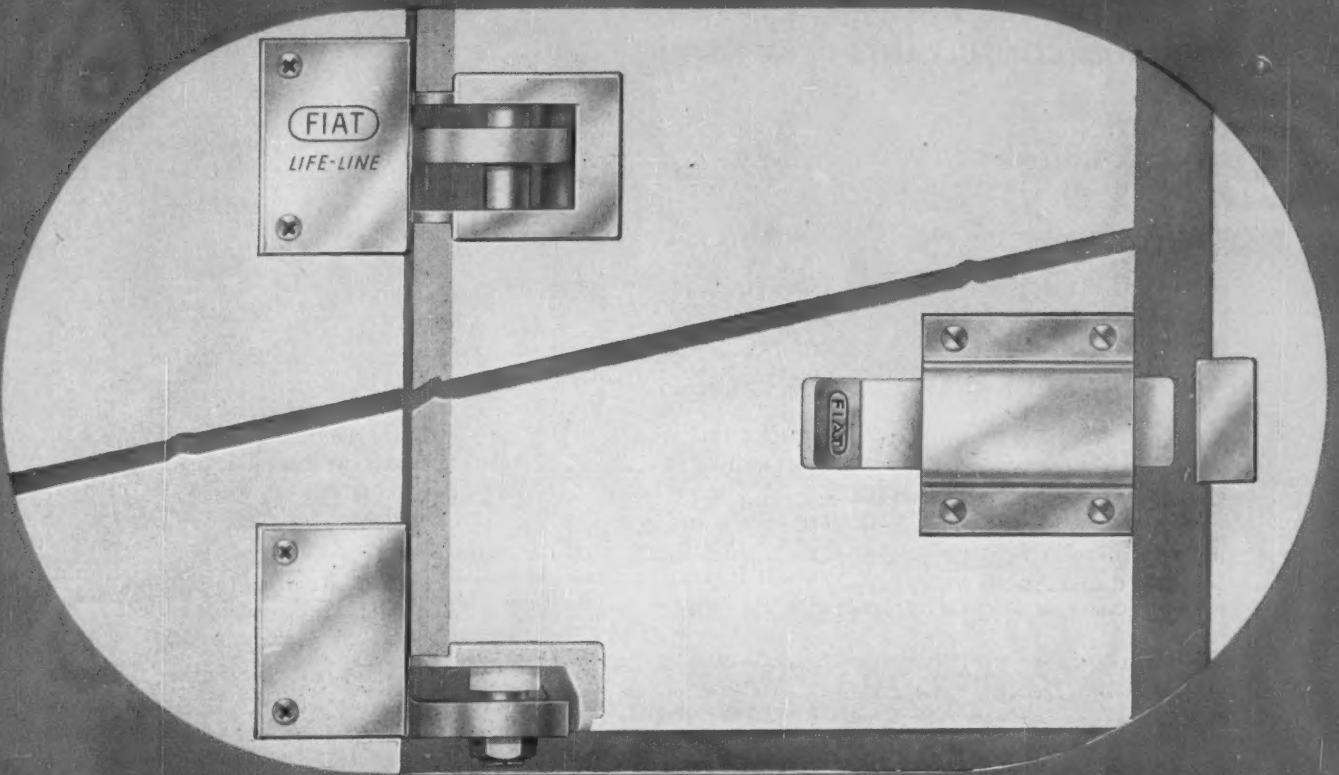


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6. Reputty all sash where old putty is loose or missing.

7. Calk all window and door frames to make them weathertight.

8. Apply one or two coats on all surfaces as indicated in Individual Building Specifications [furnish these]. All paints must be properly mixed and thinned as recommended by the manufacturer and of color chosen by school.

9. Paint materials shall be of the highest grade manufactured by one of the following firms: _____

10. Materials shall be delivered to the job in the original containers with the seals unbroken and labels intact.

11. School's representative will inspect projects during contract's life.

In addition to our standard specifications, we submit individual building specifications. — W. A. DAVENPORT, Providence, R.I.

READER OPINION

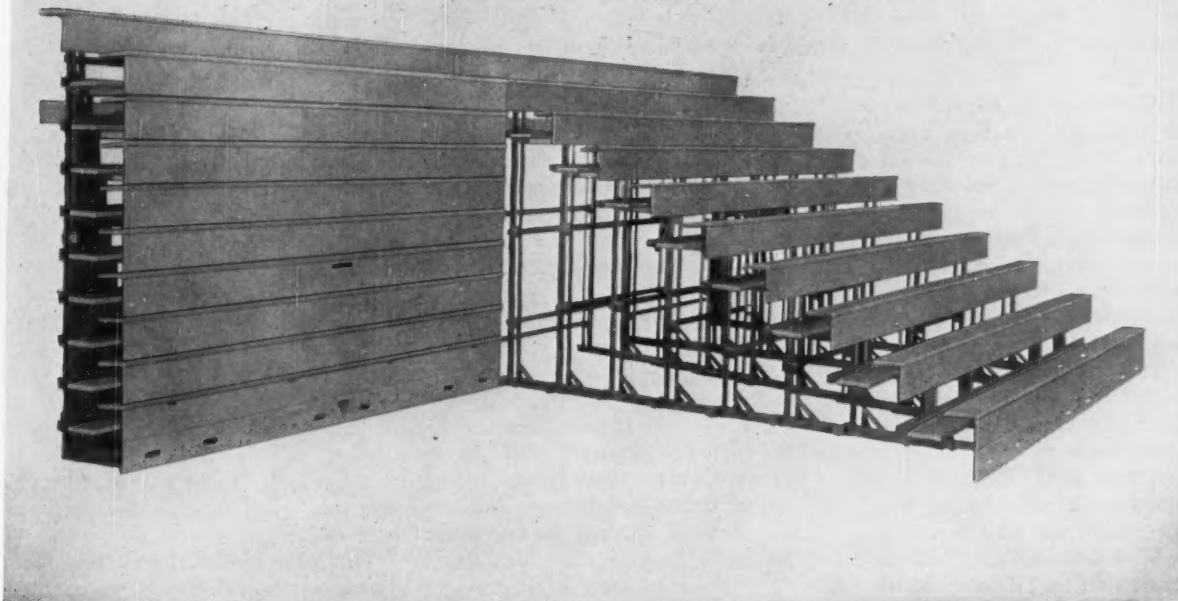
Record Teacher-Parent Conference for Father's Benefit

As I read the article on parent-teacher conference in the October issue of *THE NATION'S SCHOOLS* ("A Parent's Report on a Parent Conference," page 86), I was very much interested in the suggestion made in the closing paragraph. I agree with the mother that it would have been very nice if the father might have had a more direct report on the conference.

And I believe that the answer to the suggestion was found on the next page of the periodical. In the Audio-Visual Department section there appeared a group of articles relating to the use of the tape recorder as a teaching device. Why can't this piece of equipment be used to make a recording of the interview for the benefit of the other parent?

If it would not be suitable to send the tape home, a copy of the interview could be prepared and sent to the parent. Many schools have the equipment and the trained personnel to do this. I plan to use this procedure at the next personal conference relating to my child.—O. B. STAMPER, director, audio-visual education, Northern State Teachers College, Aberdeen, S.D.

ALL THE FEATURES you want in gym seating!



Name the factors *you* consider the most important in gym seats . . . Safety and strong construction?—Roomy seating capacity?—Maximum visibility?—Comfort?—Ease of operation?—Accessibility for cleaning and maintenance?—Lowest upkeep? Whatever feature tops your list of “musts”, critical comparison will prove the superiority of Medart Telescopic Gym Seats.

Medart's stronger, self-supporting, free-standing steel understructure does not depend on oblique bracing, springs, wall supports or wood members to support over 400 pounds per linear foot per row. Instead, seats, footboards and risers provide extra strength and rigidity.

Each row is supported on twin angle vertical up-rights—4 of them to each 16-foot row—that place the seated load on the floor, not the wall.

To suit every seating and seeing requirement, Medart Seats are built with either 22" or 24" spacing between rows, and with 10½" or 11½" row rise. Several extra inches of toe and heel room make them roomier, more comfortable.

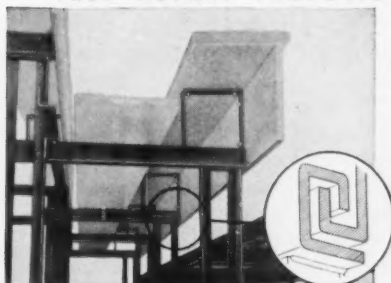
These, and many other advantages explain why Medart Seat installations far outnumber all others. Get All the facts... Write today for Complete Catalog.

MEDART TELESCOPIC GYM SEATS

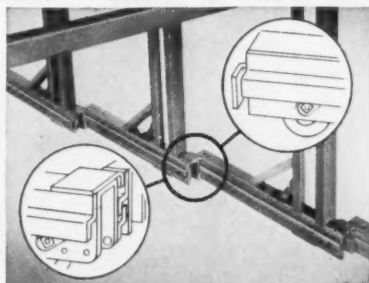
SPECIFY the best, then INSIST on it!



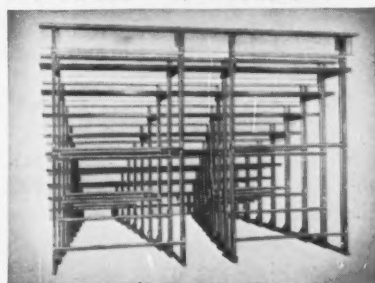
FRED MEDART PRODUCTS INC. • 3532 DE KALB ST. • ST. LOUIS 18, MISSOURI



“Floating Motion” operation. Interlocked telescoping arms and supporting members float in and out with amazing ease, prevent binding, assure true alignment. Medart Seats are easiest of all to operate.



“Dual Align” roller housings are interlocked for straight line trackage during opening and closing. Non-marring rollers retract under load; place upright load directly on floor.



Safer Weight Distribution, maximum resistance to sway, greater strength and ultimate compactness is obtained by staggering the 4 vertical uprights under each row.

ROVING REPORTER

Volunteers Help in Public Schools • Students Learn About Income

Tax • "How Would Life Be Different If There were No Numbers?"

VOLUNTEERS ARE HELPING teachers and children in New York City's Public School 191. Most are women—retired teachers, parents who like working with teachers in the classroom, laymen with a hobby or interest they enjoy passing on to the children. They work under a full-time paid coordinator, spending at least half a day a week in the school.

The Public Education Association began, in September 1955, with the agreement of the superintendent of schools, a study of volunteer services and what could be done to organize a volunteer program for the benefit of the schools and their pupils.

With financial aid from the New York Fund for Children and the Fund for the Advancement of Education, a pilot project was organized in December 1955. Now plans for expansion are being considered.

It is hoped that the project will help to determine the activities best suited for volunteers, the kind of training they should have, and how they should be recruited and selected.

Here is a typical schedule provided for a volunteer by the classroom teacher:

9 to 10—Take Jose for a walk and talk English to him. (At P. S. 191, 42 per cent of the children are Puerto Ricans with no knowledge of English.)

10 to 11—Clerical work. Prepare supplementary reading material.

11 to 12—Work with a small group of children at a table.

12 to 1—In the lunchroom with the children.

1 to 3—Go on field trip with teacher to Grand Central Terminal.

Volunteers give help to the particular pupil who needs extra attention the teacher has no time to give him, to the youngster whose special gifts can be discovered only if he is given individual consideration. They do clerical work because, as the P.E.A. noted, "every minute not spent teaching is 30 minutes lost to the children—but clerical work must go on."

Also volunteers have helped out at registration and during the anti-polio inoculations; developed libraries and special exhibits; graded achievement tests; conducted after-school activities; made posters; assisted in lunchrooms, and helped with filing, duplicating and recording.

"It is already evident that teachers are delighted to have the help the volunteers provide and that the volunteers find the work rewarding," the P.E.A. reports. "It would appear that the School Volunteer Project can be of inestimable value in improving school-community relations and the education of children in the public schools."

"PRACTICAL" is the word to describe a unit of work now incorporated in the course of study of Frankford High School, Philadelphia. In cooperation with the U.S. Internal Revenue Department, the high school's commercial department has arranged to educate students about practical income tax problems.

The tax unit is divided into three parts. One concerns the tax problems of those with part-time jobs. The other two look to the future: Students learn that the married wage earner with a small income may find it to his advantage to compute his tax from tax tables. They also learn how to deal with more complicated situations in-

volving income from wages, plus interest and dividends. Instruction covers the standard deductions and procedures used in itemizing deductible expenses, with emphasis upon the most advantageous method for the individual.

In class discussions personal tax questions, as well as questions from the students' parents, are considered.

IF CHILDREN can be helped to realize that not everything has been discovered or invented and cataloged, that there is no end to knowledge, then they will find all of life's problems challenging.

This is the kind of attitude Teacher Joanne Reynolds tries to encourage in fourth graders at Arrandale School, Great Neck, N.Y. "How would your life be different if there were no numbers?" she asked the youngsters in an attempt to help them understand the origins of our number system. Some of their answers were:

"I wouldn't know how old I was."

"We couldn't tell who was elected president because we couldn't count the votes."

"I wouldn't know when it was time to come to school."

The youngsters tried to picture themselves as a shepherd trying to keep track of the sheep without a system of counting. They suggested keeping a pile of sticks, each stick corresponding to one animal, or scratching marks on wood. But either method was time consuming; some kind of symbol was needed, the fourth graders realized.

The next step was to invent their own unit of measurement and measure their classroom. They also devised several methods for telling time: a candle that burned down in a bottle, a weight that swung back and forth on the end of a string, and a system of pulleys and uneven weights.

One child's comment was: "When we grow up maybe one of us will invent a better way of working with numbers."





THIS MAN IS WORKING FOR YOU!

IT'S NO MIRACLE . . . PEABODY HAS PLANNED:

On the job research in the school has proved the "need of furniture" that would be:

Maintenance free—less custodian care. Stronger than steel or wood—yet no deterioration, corrosion, rust splits, separation or splinters. Instant on correct posture—yet affords perfect comfort. Contemporary in concept and design—still functional and rugged. In colors for beauty—In tone for harmony.

Peabody Engineering know-how has produced:

- Molded fiberglass seat units
- Solid fiberesin plastic tops and tablet arms
- Color harmony
- Contemporary design—functional in purpose



YOURS FROM PEABODY

A complete contemporary series of school furniture resulting from research, engineering know-how, and 53 years of quality production. Tablet and study top chairs, single pupil open and lifting lid tables. Movable and fixed high school units.

*No one ever regretted
buying Quality*



PEABODY

NORTH MANCHESTER, INDIANA

Extra strong, extra safe frames

One of 9 reasons why schools find International Bus Chassis cost least to own!

Our frames are custom made, built right in our own plant. We know exactly what is required for each model—and make them to exceed all school bus standards.

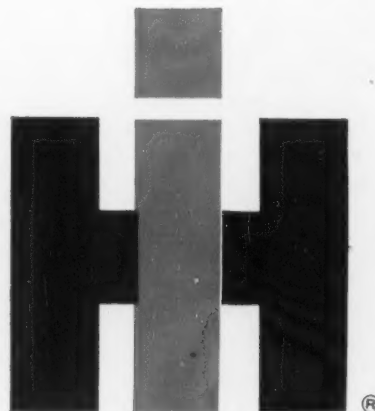
Deep, wide-flanged side members and strategically located crossmembers are securely made into an integral unit with special cold squeezed rivets. Result: a strong foundation with year-after-year durability and extra safety.

This is another example of how

INTERNATIONAL quality-builds bus chassis—uses the best parts, features and components—spends more to build the chassis so it costs least to operate. And INTERNATIONALS do cost *least* to own; cost records prove* this.

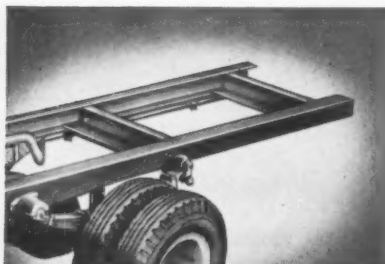
There's a lot more to the INTERNATIONAL better-built story. It will pay you to find out all about it. Your nearby INTERNATIONAL Dealer is the man to see.

**Signed statements in our files, from fleet operators throughout the U. S., back up this statement.*

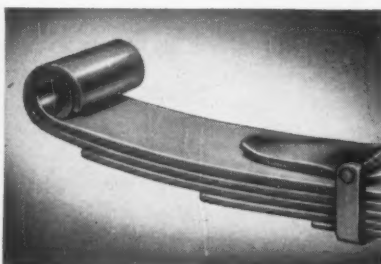


INTERNATIONAL HARVESTER COMPANY, CHICAGO

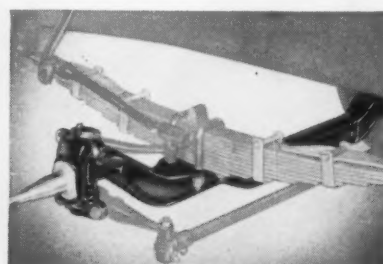
Motor Trucks • Crawler Tractors
Construction Equipment • McCormick®
Farm Equipment and Farmall® Tractors



1 Every Schoolmaster Steel-Flex frame combines great strength with proper flexibility. Cold squeezed rivets for extra durability. Sturdy crossmembers and channel type front bumper add to the safety margin built into every frame.



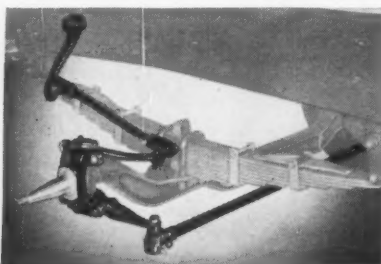
2 Long and strong springs effectively cushion passengers and driver against road shocks and vibrations. Rear-shackled front springs with double-wrapped main leaves provide smoother riding, longer life and increased safety.



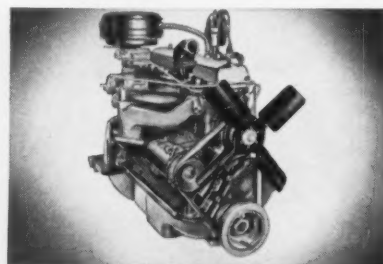
3 Axles meet all school bus standards. 6 front axles have capacities ranging from 3,900 to 7,000 lbs. All are steel forgings with extra safe shot-peened, stress-relieved spindles. 8 rear axles are offered with a complete selection of ratios.



4 Safe stops are synonymous with INTERNATIONAL brakes that evenly distribute stopping effort over entire lining area. You get smooth, easy stops and extended lining life. Power brakes standard on most models. Air brakes for larger models.



5 Safer, easier handling and greater maneuverability with cam and roller-mounted twin lever type steering. Controls ahead of front axle. Solid steel drag links are the positive safety type. Power steering optional on all models.

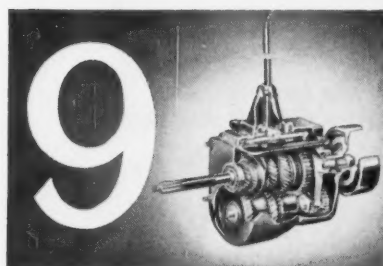


6 Powerful high torque engines exceed all school bus requirements. All 6 are the 6-cylinder type that produce *usable* horsepower at low, economical rpm. You get maximum dependability, lowest operating and servicing costs.



This is the popular INTERNATIONAL Model S-183 Schoolmaster, one of six specialized school bus chassis to meet every transportation need. Available in the world's widest choice of models with a wide selection of wheelbases to

mount bodies to transport 24 to 66 passengers. For safe, dependable, economical, comfortable pupil transportation, you can't beat an INTERNATIONAL... the school bus chassis that surpasses most established standards.



7 Choice of 9 transmissions — automatic, 4-speed, 5-speed direct and overdrive. Every one ruggedly built with the proper capacity and ratios to match all operating conditions. You save fuel, get better all-round performance and longer bus life.



8 Exclusive clutch design with roller-mounted release fingers reduces pedal pressure by 25% to make driving a lot easier. Engagement is smoother, too. Big lining area greatly increases clutch life. You save maintenance time and costs.



9 World's most complete line. INTERNATIONAL also builds 16 Metro® buses for 8 to 20 passengers and the 8-passenger Travelall®, plus special models. There's an INTERNATIONAL to suit your passenger transportation needs exactly.



**How could
we say it
better?**

VELVA-SHEEN
solved these problems

- Dust on concrete floors
- Dust in air and on shelves
- Dust and dirt on merchandise
- Costly maintenance supplies



THE OWL DRUG CO



WAREHOUSE

Mail Address: P. O. BOX 2297, TERMINAL ANNEX, LOS ANGELES 50, CALIF.

Freight & Parcel Post Address: 3761 FRUITLAND ROAD, VERNON, CALIF.

June 6, 1956

Majestic Wax Co.
1600 Wynkoop Street,
Denver, Colorado

Gentlemen:

As you know we are now using your product Velva-Sheen. It has proved most satisfactory and we are happy with it for three reasons. (1) It is easy to apply. (2) It keeps the dust down and consequently keeps our shelves and merchandise cleaner. (3) It has cut our sweeping time about fifty percent.

If you care to use any of this information in your advertising it will be satisfactory with us.

Sincerely,

Owl-Rexall Drug Co.

M. H. Mundy
M. H. Mundy
General Manager

MEM:s:w

ARIZONA • CALIFORNIA • COLORADO • IDAHO • MONTANA • NEVADA • NEW MEXICO • OREGON • UTAH • WASHINGTON • WYOMING

You can depend on any drug product that bears the name



Order Majestic products from your sanitary supply house — or write us for the name of your nearest supplier. Majestic mops, Majestic Velva-Sheen, Majestic dust cloths, Aerosol Velva-Sheen, Chalk-Off Cloths and Chalk-Off Reviver.

MAJESTIC WAX COMPANY

DENVER, COLORADO



Trim Line



**Chrome-Plated
Tubular Steel
School Furniture**

NOW AVAILABLE WITH — SOLID WOOD ★ LAMINATED PLASTIC ★ HEYWOODITE SOLID PLASTIC



ONLY HEYWOOD-WAKEFIELD *Trim Line* OFFERS
YOU THIS COMPLETE SELECTION

- ★ **Solid wood** desk and table tops, chair seats and backs, and tablet arms.
- ★ **Laminated Plastic** desk and table tops, and tablet arms.
- ★ **HeyWoodite Solid Plastic** desk tops, chair seats and backs, and tablet arms. HeyWoodite, an exclusive Heywood-Wakefield development, is a single homogeneous piece of solid plastic of smooth, virtually indestructible construction.
- ★ **Five Book Box Colors**, each harmonizing beautifully with natural wood, laminated plastic or solid plastic seats and tops.
- ★ All units made with Heywood's $\frac{5}{8}$ inch tubular steel frames, lifetime-plated with durable chrome. Strong and light in weight, Trim Line furniture pays for itself in maintenance saved.



ONLY HEYWOOD-WAKEFIELD *Trim Line* OFFERS
YOU THIS COMPLETE RELIABILITY



- ★ 131 years of experience, research and design skills.
- ★ Highest quality materials and finest production techniques.
- ★ A dependable source for additional equipment or replacement units.
- ★ Responsibility at start of order through installation and always at your service.



AUDITORIUM AND PORTABLE SEATING

For generations, Heywood-Wakefield has been a leading factor in the manufacture of comfortable auditorium seating designed for long life and low maintenance cost. The attractive models shown here have proven themselves in schools from coast to coast. All chairs are available in a wide range of wood and metal finishes and a variety of beautiful, durable upholstery fabrics.

★ SEND FOR COMPLETE NEW CATALOG ★



Heywood-Wakefield Company • Menominee, Michigan
Please send me your 1957 catalog of Trim Line classroom furniture, auditorium and portable seating.

Personal Name _____

School _____

Street _____

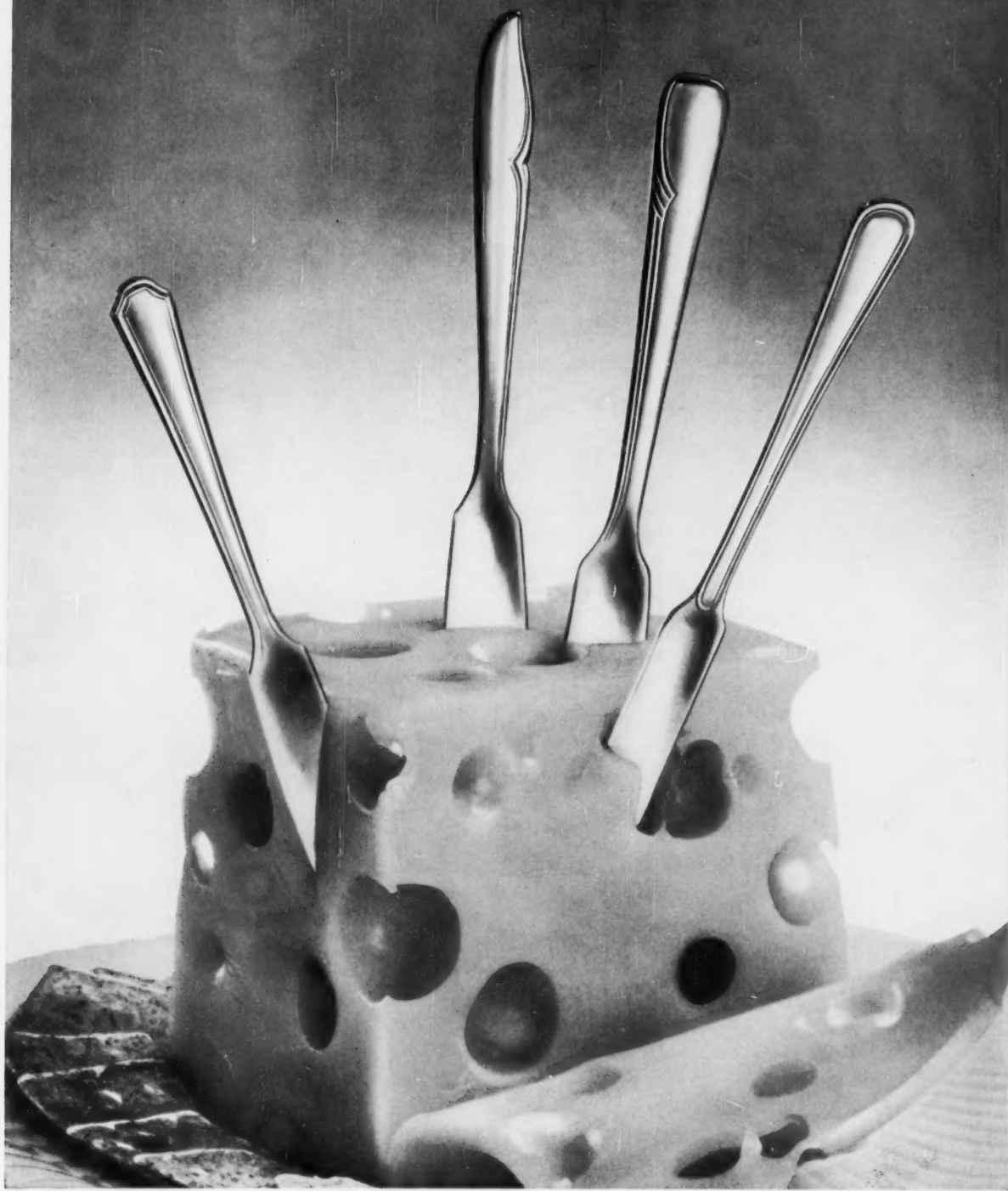
City _____

Zone _____

State _____



All patterns created in the Design Studios of Oneida Ltd. Silversmiths.



Left to right: Seneca,* Oneida* Hotel Plate; Profile,* Oneidacraft* De Luxe Stainless; Valor,* Oneida* Stainless; Regis,* Wm. A. Rogers* Hotel Plate.

Say Welcome with tableware by Oneida. In silverplate
or stainless, in all price lines... beauty designed for your needs.

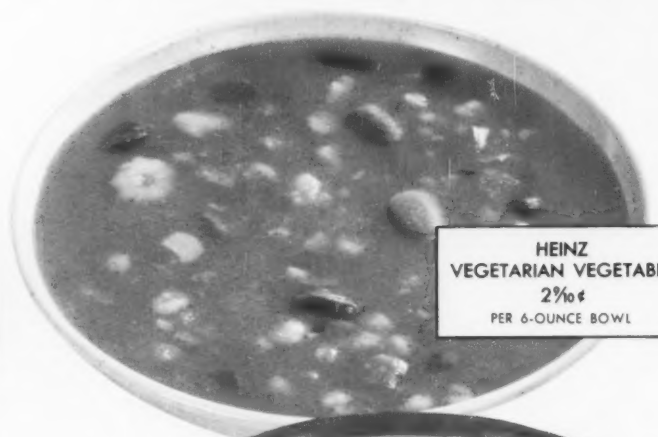


HOTEL AND RESTAURANT DIVISION, **ONEIDA LTD. SILVERSMITHS**, Oneida, New York *TRADEMARKS OF ONEIDA LTD., ONEIDA, N.Y.

COMPARE AT YOUR PRESENT



HEINZ
CREAM OF TOMATO
2 $\frac{1}{3}$ ¢
PER 6-OUNCE BOWL



HEINZ
VEGETARIAN VEGETABLE
2 $\frac{1}{10}$ ¢
PER 6-OUNCE BOWL



HEINZ
BEEF NOODLE
3 $\frac{3}{8}$ ¢
PER 6-OUNCE BOWL



HEINZ
CREAM OF CHICKEN
3 $\frac{3}{8}$ ¢
PER 6-OUNCE BOWL



HEINZ
CLAM CHOWDER
3 $\frac{3}{8}$ ¢
PER 6-OUNCE BOWL

VARIETY	Cost per 6 oz. bowl
BEAN	2 $\frac{1}{10}$ ¢
BEEF WITH VEGETABLES	3 $\frac{3}{8}$ ¢
CHICKEN NOODLE	3 $\frac{3}{8}$ ¢
CLAM CHOWDER	3 $\frac{3}{8}$ ¢
CHICKEN RICE	3 $\frac{3}{8}$ ¢
CREAM OF CHICKEN	3 $\frac{3}{8}$ ¢
GENUINE TURTLE	3 $\frac{3}{8}$ ¢
CREAM OF MUSHROOM	3 $\frac{3}{8}$ ¢
CREAM OF TOMATO	2 $\frac{1}{3}$ ¢
SPLIT PEA	3 $\frac{3}{8}$ ¢
VEGETABLE WITH BEEF STOCK	2 $\frac{1}{10}$ ¢
VEGETARIAN VEGETABLE	2 $\frac{1}{10}$ ¢
BEEF NOODLE	3 $\frac{3}{8}$ ¢
CREAM OF PEA	2 $\frac{1}{10}$ ¢
CHICKEN CONSOMME	3 $\frac{3}{8}$ ¢

OUR EXPENSE-- SOUP WITH HEINZ

1. COMPARE THE FLAVOR... 2. COMPARE THE COST—
THEN... 3. DECIDE IF MAKING SOUP IS WORTH YOUR
CHEF'S VALUABLE TIME!

WE'LL SEND YOU A FREE CHEF-SIZE TIN of any of the 12 Heinz soups. All we ask you to do is heat—open—taste—compare with the soup you now serve!

FIRST COMPARE FLAVOR. That's simple. If you don't like Heinz *at least* as well as your present soup, don't go any further. Heinz soups are made of ingredients the finest kitchen would be proud to use. They're seasoned and cooked under the supervision of Master Chefs. Taste and see for yourself!

THEN COMPARE COST. Many kitchens do not know their actual cost on soup because so many of the

costs are *hidden*. It's easy to measure the cost of ingredients but how about these hidden costs:

*Labor costs . . . Chef's time . . . fuel . . .
spoilage and leftovers . . . tied-up cooking equipment*

These costs cannot be figured exactly, but they *are* costs and should be considered.

COMPARE AND SEE FOR YOURSELF. Let your own taste and your own costs decide. Fair enough? Fill in the coupon and mail it for your free Chef-Size tin of Heinz Soup *now*!

HEINZ SOUPS

YOU KNOW IT'S GOOD BECAUSE IT'S HEINZ



Heinz 51-oz. Chef-Size Soups are condensed . . . one tin makes two.

FREE
CHEF-SIZE
TIN OF
HEINZ
SOUP

H. J. Heinz Co., P. O. Box 57, Dept 28, Pittsburgh 30, Pa.
I'll compare and see for myself. Send me a free Chef-Size tin of Heinz Condensed Soup (makes 102 ounces of soup).

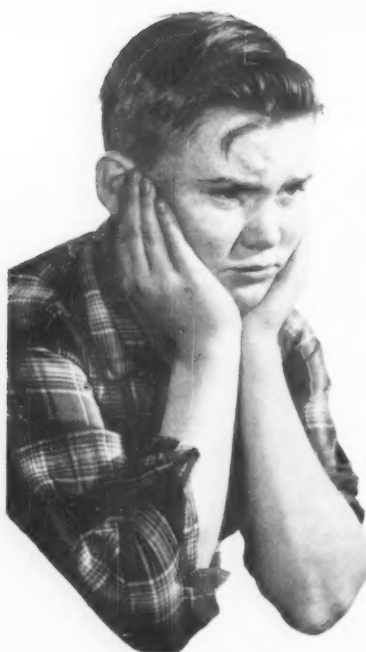
Variety _____
(any soup you choose)

Name _____ Position _____

Affiliation _____

Street _____

City _____ Zone _____ State _____



Problem Child or...Hearing Problem Child?

2 Children in every class-room have Hearing Defects

Five to 7 percent of the pupils in any school have hearing defects which require special attention. In the average school room of 35, therefore, about 2 pupils have hearing defects. Student failures and repeated grades can cause teacher dissatisfaction, often resulting in teacher turnover. You can easily find out if the "dull" child is just a child who can't hear. The cost of setting up a hearing test program is less than the cost of one child repeating a grade. It's easy to start a hearing test program and to recommend steps to overcome the hearing handicap.

Now You Can...

Test up to 40 students

AT ONE TIME WITH

Maico MA-2 Multiple Hearing Test
AUDIOMETER



**So Easy
To Carry**

from classroom to classroom

Your school nurse can easily test the hearing of groups or individuals on this Maico precision Audiometer . . . an ideal instrument to accurately locate hard of hearing pupils in a group testing program.

Lightweight and Portable

Small, compact, lightweight, the MA-2 Audiometer is easy to carry.

Sturdy carrying case absorbs normal shocks of transportation.

Write for booklet "Why & How To Conduct School Hearing Tests."

Maico

Room 106J, 21 North Third St., Minneapolis, Minn.



LIGHT and QUIET for Modern Schools

Classroom in the De Anza High School, El Sobrante, California, showing ceiling installation of Acousti-Celotex Acousti-Lux® Translucent Panels. Architect: John Carl Warnecke.

Acousti-Celotex Acousti-Lux Translucent Panels provide school rooms with a dual-purpose ceiling . . . combining a remarkably efficient light-diffusing medium with effective sound absorption. They offer glareless, shadow-free illumination of low brightness and high visual comfort.

They conceal light sources, permit easy access to above-ceiling utilities, can be combined with acoustical tile for layout keyed to the needs of the areas. **Mail the Coupon** for complete information on this newest development in Sound Conditioning.

• U. S. PAT. NOS. 2,218,992 & 2,710,335



TRADE MARK

ACOUSTI-CELOTEX

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Sound Conditioning

Products to Meet Every Sound Conditioning Problem . . . Every Building Code—The Celotex Corporation, 120 S. LaSalle St., Chicago 3, Illinois • In Canada: Dominion Sound Equipments, Ltd., Montreal, Quebec

MAIL NOW!

The Celotex Corporation, Dept. M-27
120 South La Salle Street, Chicago 3, Illinois

Without cost or obligation, please send me full details on Acousti-Lux Translucent Panels and Acousti-Celotex Sound Conditioning Materials.

Name _____ Title _____

Institution _____

Address _____

City _____ Zone _____ State _____



The locker key problem as students see it

Jack Heller, illustrator

Student, High School of Music & Art,
New York, N. Y. Instructor: Mr. George Kaye, Chairman,
Art Department of the High School of Music & Art

Locker key down the drain

The simple solution:
Yale* Combination Locks



YALE No. 515. Up to 10,000 combinations. Rustless. Aluminum finish.

YALE No. 516. Like 515 but opens to custodian control key.

—and so is the date tonight!

Butterfingers? The coach wouldn't say so. Yet that locker key just slipped right out of sight. And the date said she wouldn't wait.

Now *why* couldn't that lock be a Yale combination lock? No key but a personal combination. No rickety lock but a good, strong one that works smooth and that you can trust.

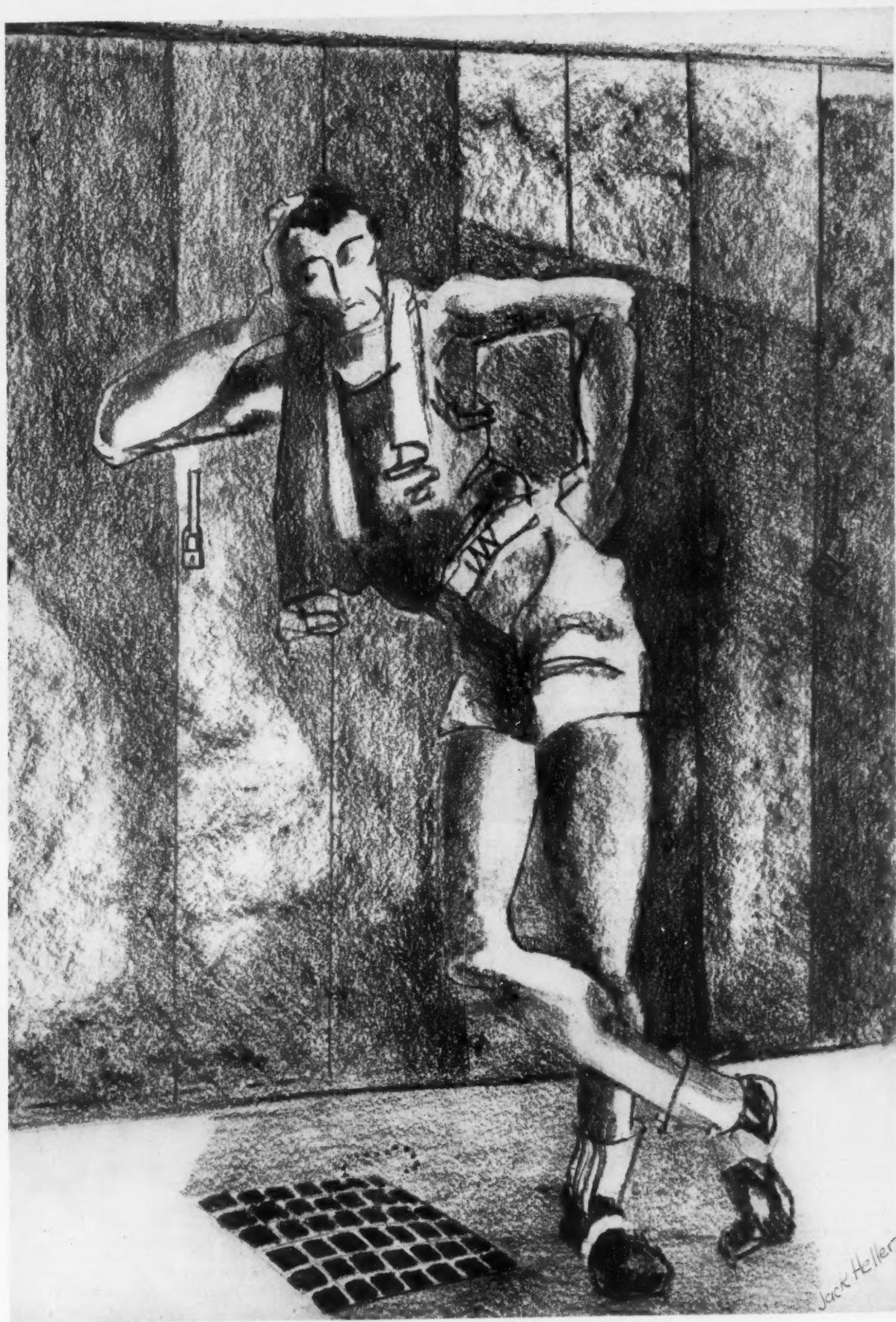
No messing around with putting out a deposit for a key, then losing it, then

waiting for another key, then waiting at the end of the year for a refund! All that paper work—why does the school put up with it? Must cost money.

Ought to mention Yale to the right party. Bet they end up writing to The Yale & Towne Manufacturing Company, Lock & Hardware Division, White Plains, N. Y.

YALE & TOWNE

*YALE—REG. U. S. PAT. OFF.





Kellogg High School, Kellogg, Idaho. Howard Andrews, Superintendent of Schools. Architects: Culler, Gale, Martell & Norrie, Spokane, Washington, and Perkins & Will, Chicago and White Plains, New York. Mechanical engineers: Lyle, Marque & Associates, Spokane. Heating and ventilating contractor: Detweiler Brothers, Inc., Twin Falls, Idaho.



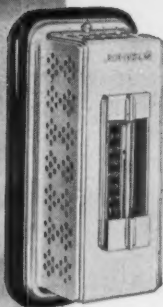
Step through any door to comfort! No matter what the activity—work, play or study—a Johnson Thermostat on the wall of each room keeps temperatures uniformly comfortable. Fast thermostat response prevents overheating, eliminates heat waste.



With floor to ceiling glass walls and high occupancy levels, cooling, rather than heating, often is needed for comfort. Sensitive Johnson Thermostats quickly reduce heat output and increase the volume of outdoor air supplied by unit ventilators.



Corridor runs along the wall, is separated from open classrooms only by free-floating locker units. Heat output of wall fin radiation along the corridor is automatically matched to outdoor temperatures to save fuel and insure comfort.



CREATIVE SCHOOL PLANNING and *Johnson Pneumatic Control*

Despite such problems as a site in a narrow gulch, with mountains on three sides and a flowing stream passing through it, planners of the new Kellogg High School developed one of the most spectacular school designs of the year. Skilled creative planning, based, obviously, on the unique local conditions encountered, is evident in every detail of this impressive building.

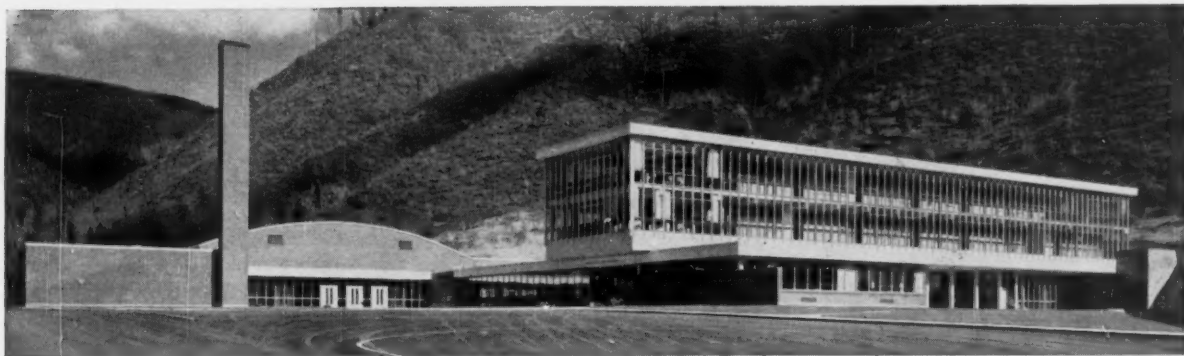
Johnson follows this same successful principle in solving the temperature regulation problems of today's schools. *Each Johnson Control System is designed and installed to meet the exact needs of the individual building, its occupants and its particular heating and ventilating equipment.* That's the only approach that consistently produces control systems that perform fully up to your expectations.

Why don't you take advantage of Johnson experience and creative planning to help solve your temperature control problems? The specialist Johnson organization originated the idea of automatic temperature control systems for schools and has planned and installed more school control systems than any other maker. Johnson also maintains a nationwide service organization that is unmatched in the industry. An engineer from a nearby branch office will gladly demonstrate how the many comfort and money-saving advantages of Johnson Control can be applied to any new or existing building, regardless of its size. Johnson Service Company, Milwaukee 1, Wisconsin. Direct Branch Offices in Principal Cities.

JOHNSON CONTROL

SINCE 1885

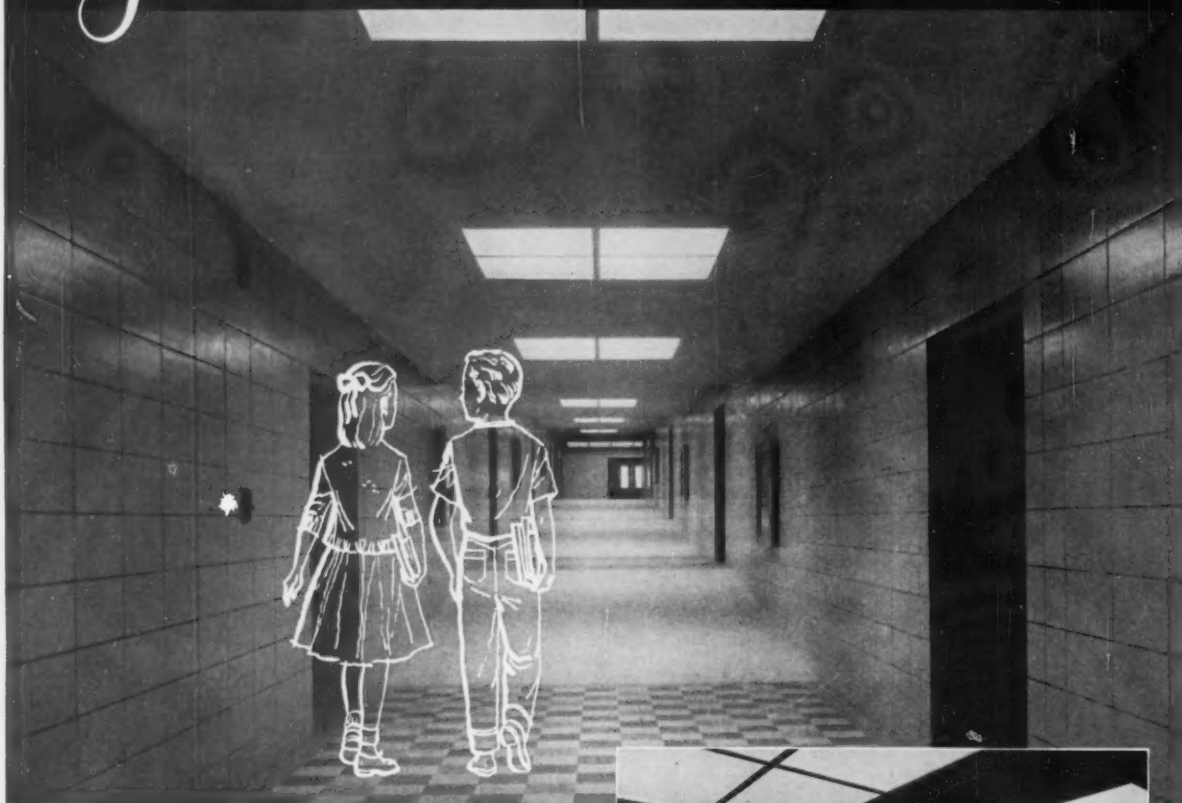
PLANNING • MANUFACTURING • INSTALLING



The three-element structure consists of a two-story classroom wing above a single-story administration-library wing and a third element for the gymnasium, cafeteria, shop and music rooms. Heating and ventilating equipment includes unit ventilators, unit

heaters, wall fin radiation and central heating and ventilating units. The Johnson Pneumatic Control System insures room by room comfort despite differences in exposure, large glass areas and varied room usage and occupancy requirements.

Glass MAKES EVERY STEP TO LEARNING SURER



Skylights of Wire Glass Achieve Open Air Atmosphere in School Corridors and Rooms

A ceiling of sunshine floods the long corridor in Fox Point Elementary School, Providence, R. I., with bright, natural light to make it safer for hurrying youngsters. Mississippi Magnalite "B" Wire Glass, Approved Fire Retardant No. 32, employed in skylights, achieves broader, more uniform light distribution . . . eliminates shadows . . . creates a pleasant, open atmosphere that relieves the stark simplicity of the long hall.

Mississippi Glass makes every step to learning surer by providing better daylighting that protects precious young eyes against fatiguing glare in classrooms and laboratories. It provides a maximum of security against breakage and entry in doors, skylights, windows.

When you build or remodel, consider the many ways in which translucent, light diffusing glass can improve your school. Figured glass by Mississippi is available in a wide range of patterns and surface finishes all "visioneered" for better daylighting.

Mississippi maintains an experimental school building on factory grounds for the study of daylighting. Take advantage of the company's wide experience. Our technicians are ready to help you with every daylighting problem.



Fox Point Elementary School, Providence, R. I.
Architects: Cull & Robinson



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WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

Will the heating
and ventilating system
you select for
your new school
meet the requirements
of 1962...or 1967
...or even 1977?

IT CAN!

On the next two pages, the latest development in unit ventilators is described. It takes the guesswork out of planning . . . it lets you provide for tomorrow's needs today with today's budget!



Here's the new HerNel-Cool II Unit Ventilator.. INSTALL IT *NOW*..



YOUR new school's heating and ventilating system can be as modern as tomorrow—and stay that way—if you plan around the new HerNel-Cool II!

Every essential for classroom comfort, including air conditioning, is provided in this "last word" system. Every month of the year, the climate inside each classroom can be that of a perfect June day—comfortable, fresh, clean—with no drafts, no dead spots, no stale over-heated air.

Check these features—only the HerNel-Cool II offers all of these:

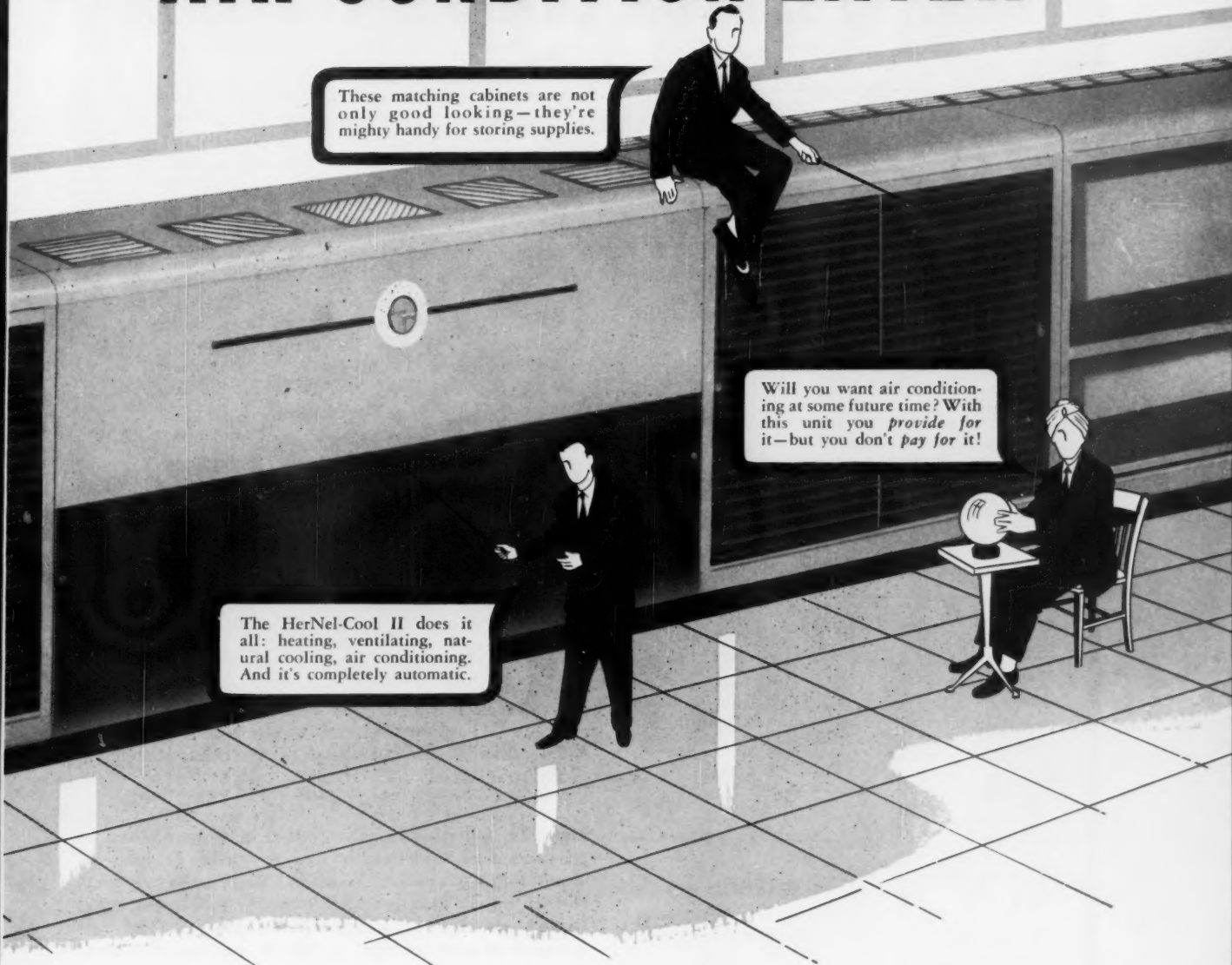
- 1 **Flexible air conditioning:** The same pipes which carry hot water for cold weather heating carry chilled water

for summer air conditioning. All you need is a chiller in the boiler room. It can be provided initially or at any future time. Whenever air conditioning is desired, you can have it with a minimum of expense, with no disruption, with no costly alterations!

- 2 Famous **DRAFT|STOP*** method of controlling window downdrafts without adding to the classroom heat load. Cold window drafts are trapped, drawn into the unit, then warmed and gently circulated.
- 3 Circulating **hot water** for heating—with either wall-hung, cabinet-base, or recessed-edge perimeter piping. The most flexible, most economical heating system there is. HerNel-Cool II heats only when heat is needed—

...by Herman Nelson

• • AIR CONDITION LATER



These matching cabinets are not only good looking—they're mighty handy for storing supplies.

Will you want air conditioning at some future time? With this unit you *provide* for it—but you don't *pay* for it!

The HerNel-Cool II does it all: heating, ventilating, natural cooling, air conditioning. And it's completely automatic.

saves fuel when it is not.

- 4 *Completely automatic individual room control* for true comfort in every season. The HerNel-Cool II "thinks for itself" and provides rapid heat, air for ventilation, or air for natural cooling as the room requires. In hot weather, when outside temperatures soar, it switches automatically to mechanical cooling.

A HerNel-Cool II system fits into today's school budget ...but its benefits will be enjoyed for many years to come. Today—or twenty years from today—pupils will be alert and comfortable from the opening of school to the closing bell. Teachers will be free to concentrate on *teaching*—in an atmosphere that's conducive to *learning*.

Want more facts? Ask your Herman Nelson representative or write to Herman Nelson Unit Ventilator Products, American Air Filter Company, Inc., Louisville 8, Ky.

**Patented, there are no substitutes.*

herman nelson

UNIT VENTILATOR PRODUCTS

American Air Filter Company, Inc.

SYSTEM OF CLASSROOM COOLING, HEATING AND VENTILATING

Any Fuel... Any Climate...

HERMAN NELSON UNIT VENTILATORS GIVE MORE CLASSROOM COMFORT PER DOLLAR



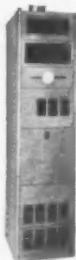
**HOT WATER
OR STEAM**

Herman Nelson Unit Ventilators with patented DRAFT|STOP control downdrafts without adding to the heat load, provide ideal classroom climates.



**AIR
CONDITIONING**

The HerNel-Cool unit provides mechanical cooling, heating, ventilating or natural cooling as required. Thoroughly tested in hot, humid climates.



GAS

New UNivent Gas School Ventilator provides all the health and comfort features of the DRAFT|STOP system in a completely self-contained unit.



MILD CLIMATES

AMERVENT built especially for schools in mild climate areas, provides fresh air cooling, heating and ventilating within the nominal cost of heating alone.



ELECTRIC

New Electric Unit Ventilator in which an electric heating element replaces the hot water or steam coil provides all DRAFT|STOP comfort features.

Herman Nelson now offers a line from which you can select the ideal unit for meeting any school's requirements! The cooling, heating, ventilating system can be "tailored" to provide true classroom comfort in the most economical and most practical way.

VARIETY OF FUELS

In temperate or cold climates, the *Herman Nelson Unit Ventilator* operates with either *hot water, steam, gas or electricity*. The patented DRAFT|STOP system has given a new meaning to "classroom comfort" as it controls down drafts and automatically provides a constant supply of properly heated or cool fresh air.

AIR CONDITIONING

HerNel-Cool units offer an economical and practical solution to the increasingly important air conditioning problem. Most of the year they provide heat, ventilation or natural cooling (with outside air). Air conditioning can be provided at any time by simply adding a chiller to the system. The units switch automatically to mechanical cooling with chilled water circulating in the same piping that carries hot water during cold weather.

MILD CLIMATES

Schools in mild climates have an increased cooling and ventilating problem and a decreased heating problem. With Herman Nelson *AMERVENT* these schools can now enjoy all the essentials for classroom comfort—cooling, heating and ventilating—without paying for the excess heating capacity required in frigid climates.

* * *

Flexibility will always be important to Herman Nelson—for there is no "one best" system to provide for heating, ventilating and cooling classrooms. The health and comfort of pupils and teachers come first. Climate area, design and structure of each school will indicate the most economical and practical system to achieve that ideal classroom atmosphere.

Would you like more information? Ask your Herman Nelson representative or write to Herman Nelson Products, American Air Filter Company, Inc., Louisville 8, Kentucky.

BETTER AIR IS OUR BUSINESS



herman nelson
UNIT VENTILATOR PRODUCTS

American Air Filter Company, Inc.
System of Classroom Cooling, Heating and Ventilating

The NATION'S SCHOOLS

NEW *Drymaster* **ON ANY DISHMACHINE**
DRIES DISHES, GLASSES, SILVER
FOR ONLY 21¢* A DAY!

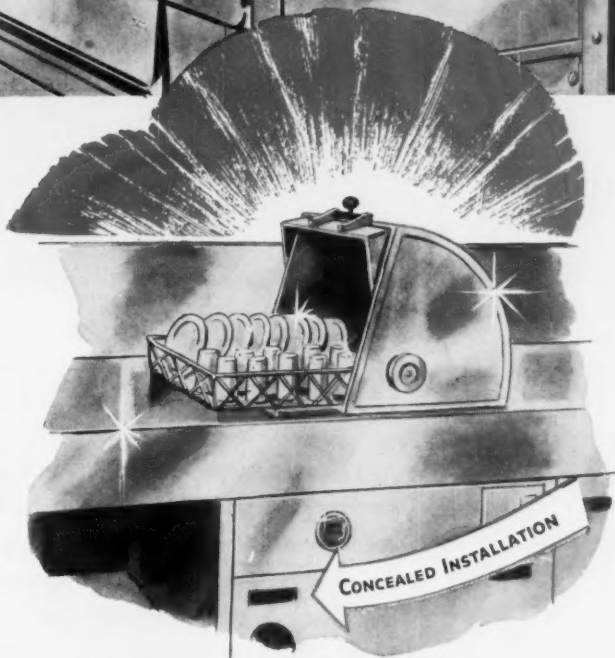


Any make, model or size dishmachine can be equipped for automatic drying with Economics Laboratory's new, low-cost rinse injector, "The Drymaster." So compact it fits anywhere. So low in price, every dishroom can afford it.

21¢ a day installs your "Drymaster." And you can forget about maintenance! It's guaranteed, built with watch-like precision. No electricity. No gadgets.

With a "Drymaster," dishes come dry, gleaming and spotless—right from your dishmachine. Proved in thousands of dishrooms, the "Drymaster" can cut costs by as much as 25%! Get the whole story today by calling the SOILAX sales office listed in your phone book. Or write to:

*Covers basic unit price



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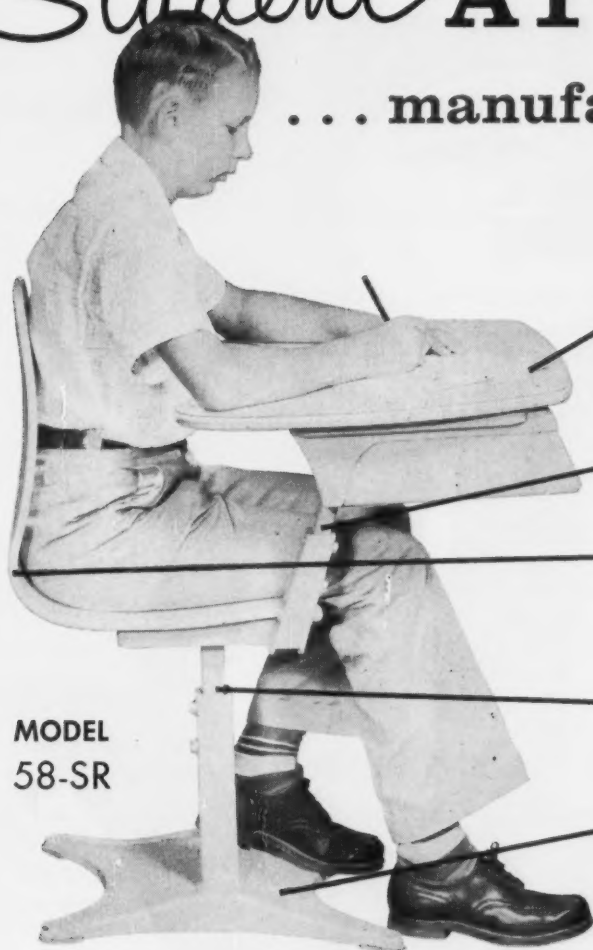


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J. I. HOLCOMB MFG. CO., INC. • 1601 BARTH AVE., INDIANAPOLIS, INDIANA
New York • Dallas • Los Angeles • Toronto

Student **ATTENTION**

... manufactured by
specialists



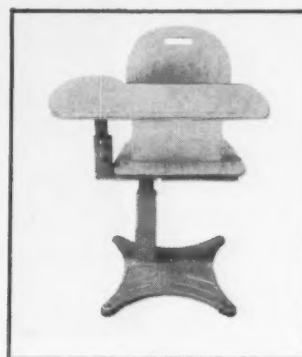
**MODEL
58-SR**

- **MAXIMUM WORKING AREA** — The specially designed desk top gives the student a maximum working area and properly supports the arms — permitting reading and writing without awkwardly bending forward. Better posture is developed — alertness and attentiveness result!
- **UP-DOWN-IN-OUT** — A quick, positive adjustment raises or lowers the top — upward and outward, downward and inward — to suit each pupil comfortably.
- **DISCOURAGE SLOUCHING** — The semi-flexible Body-Contour Seat-Back encourages a straight, upright position and discourages slouching — reducing physical and mental fatigue that impedes proper learning.
- **LIKE A GLOVE** — The Seat-Back can be raised or lowered in seconds to fit students of all sizes — exactly. Correct, relaxed seating is assured!
- **SLOUCH THE FEET — NOT THE MIND** — The exclusive Offset Movable Pedestal allows full backward and forward leg movement — preventing cramped, frustrating positions that cause distraction.



**MODEL
602-W**

**MODEL
57**



Let us prove to you how *general* desks make your students want to pay attention.

**WRITE
TODAY
FOR
MORE
INFORMATION**

Be sure to see our exhibit at the AASA Convention — Booths 1317-1319.



featuring the designs of William James Barger

***general* SCHOOL EQUIPMENT CO.**

869 HERSEY STREET, ST. PAUL 14, MINN.

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Hunt and peck adding machine operation is as out of date and unacceptable in today's business as it is in typewriting. Ten-key touch operation has become the accepted business standard and the need for school training on these machines is constantly growing.

As was true in early typewriter instruction, Remington Rand is also the leader in touch method

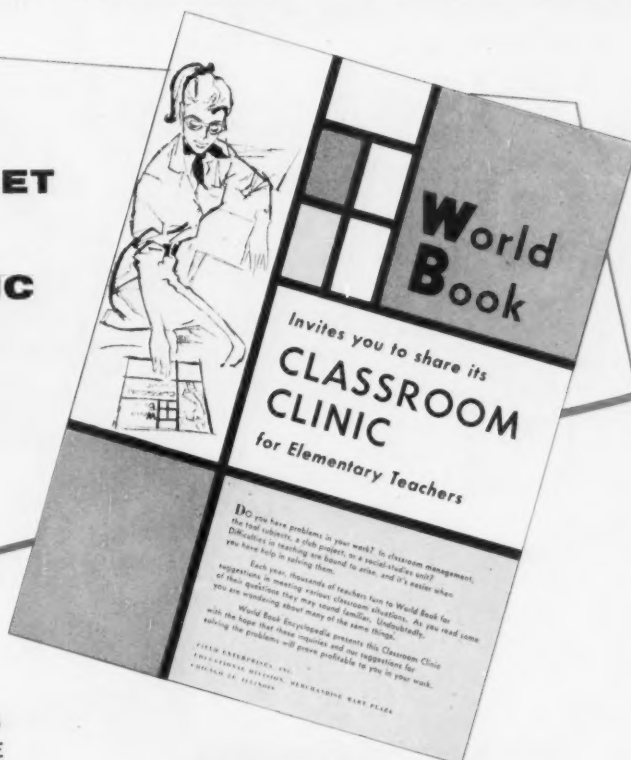
adding machine operation teaching techniques and has developed a *ten lesson course for teachers* that contains all the necessary materials including instructor's guide, exercise sets, students' handbooks, wall charts, certificates of proficiency, etc.

Write to Remington Rand, Room 1222, 315 Fourth Avenue, New York 10 and ask for your copy of A1047.

Remington Rand
DIVISION OF SPERRY RAND CORPORATION

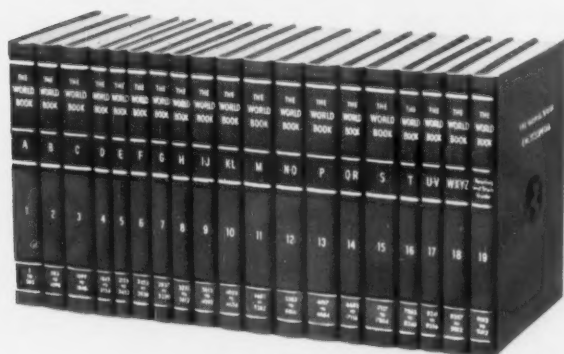
ANOTHER SAMPLE OF WORLD BOOK'S SERVICE TO TEACHERS

NEW FREE BOOKLET
"CLASSROOM CLINIC
FOR
ELEMENTARY
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THAT WORLD BOOK
BELONGS IN EVERY CLASSROOM

Modern educational methods demand the use of an up-to-date reference to encourage the slower student and yet provide an opportunity for more rapid class members to advance. By every standard, the set you should select is World Book Encyclopedia. World Book is designed to provide you with more services—classroom and extra-curricular—than any other work. Interestingly written, easy to use, accurate, informative, World Book is packed with appeal for students of all ages, at every grade level. Let us send you our free booklet that will show you specifically how other teachers use World Book to best advantage.

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YOUR FREE COPY

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 World Book, Dept. 1412
 Box 3565, Chicago 54, Illinois

I would like to know more about how World Book can be useful in my classroom work. Please send me your free copy of "Classroom Clinic for Elementary Teachers."

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Address _____

City _____ State _____

School _____ Grade Taught _____

"THANK
GOODNESS,"
said the teacher,
"We're buying



BOSTON this time!"



**"Jack-of-all-trades"
BOSTON KS**

PERFORMANCE—
unequalled for rugged strength—
producing clean, sharp points
without waste

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new position lock on 8-size pencil
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CLEANLINESS—
no messy fallout—nickel-plated
steel receptacle stays put

STRENGTH—
stand has "bridge-like
design" with a steel rack

EFFICIENT—
Boston Speed Cutters, with 25%
more cutting edges, consistently
produce clean sharp points



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duty sharpeners"**

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- 3 points—fine, medium and blunt—finger-tip adjustment on outside
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Comprehensive school report on
care, selection and use of sharp-
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Brunswick

CONVERTS CLASSROOMS INTO LEARNING AND LIVING ROOMS

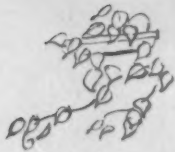
Education, today, is a strong *dynamic* force working with the *whole* personality of a child. He *lives* his education by *doing* things in a warm, homelike, *inviting* classroom. He is surrounded by imaginative materials and furniture to bring out the best that's in him.

Today's fluid education demands the adaptability that *only Brunswick* furniture offers. Brunswick, backed by 114 years of experience and intensive research, led the way toward comfortable, mobile, flexible and functional school furniture. It stacks, groups and nests wherever possible . . . the furniture and cabinets are truly alive with color . . . it's all designed, engineered and constructed by fine craftsmen. Brunswick is a related *family* of units that mix or match according to the needs of the moment in a wide range of sizes from the elementary to the college level —possible *only* with Brunswick—the *most complete line* in the school furniture field.



TWO ① PRODUCTS

GENERAL OFFICES • TOLEDO 1, OHIO



chair desk



armchair



study top combination



fiberglass stacking chair



stacking chair



all-purpose chair



tablet arm chair



book box combination



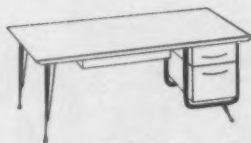
stacking desk



book box desk



trapezoidal table



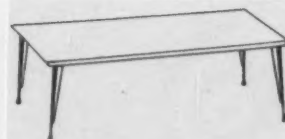
teacher's desk



round table

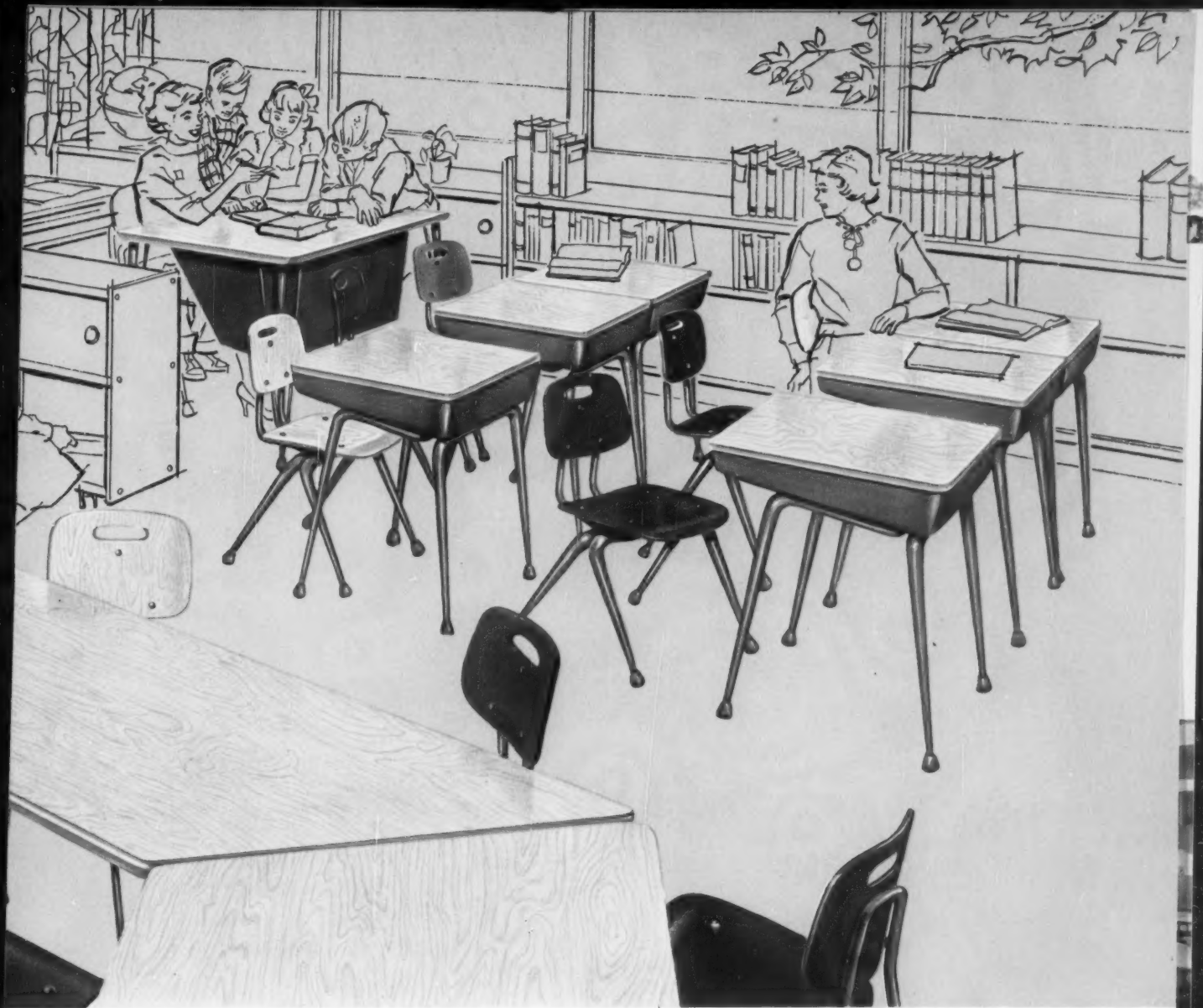


half-round table



rectangular table

Brunswick



SCHOOL FURNITURE

*the one line
that continues to
set the pace!*

Brunswick set new standards in comfortable, movable, colorful furniture . . . and *continues* to be the hallmark of modern classroom furniture. It is scientifically designed and really comfortable . . . yet is built to withstand 20 years of the roughest wear. It is unburdened by in-the-way, unsightly cross-bracing . . . yet is unbelievably strong and durable, remarkably flexible. It is light and color-bright . . . is so easy to keep clean. The *family* look with all metal parts Sage gray, all wood hard northern White Maple . . . with special Maple-grained plastic work surfaces. The chairs, in both Maple and fiberglass, are radiant with color.

TWO **®** PRODUCTS

GENERAL OFFICES • TOLEDO 1, OHIO

Brunswick FLEXIBLE CA



teacher's
storage cabinet

Dynamic education is a reality . . . with Brunswick movable cabinets that flex with every need of the classroom. A far cry from expensive, fixed, custom-constructed storage units, Brunswick cabinets move *where* you want them, *when* you want them . . . serve as new teaching aids, as extra work surfaces, room dividers, project areas, wall cabinets, changeable storage areas. Sturdy enough to stand the roughest wear. Designed with interchangeable parts so you can take out dividers, add shelves, or change heights to meet the ever-changing functions of a classroom!

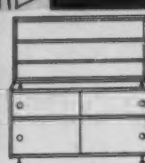
CABINETS

the first and only cabinet line
to completely integrate with
modern teaching methods!

typical cabinets...



four tier cabinet



bookshelf



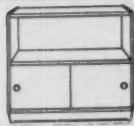
one tier cabinet



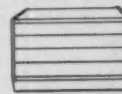
student's wardrobe



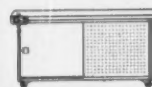
paper storage cabinet



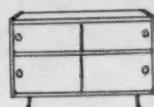
double height general storage cabinet



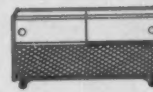
paper drawer cabinet



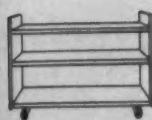
craftwork bench



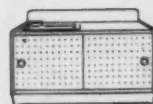
two tier cabinet



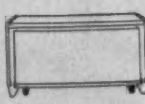
audio cabinet



book truck



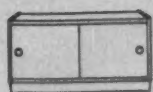
cabinet sink



toy cart and table shell



teacher's wardrobe-storage cabinet



general storage cabinet

TWO **I** PRODUCTS

GENERAL OFFICES • TOLEDO 1, OHIO

FLEXIBLE, MOVABLE

Brunswick

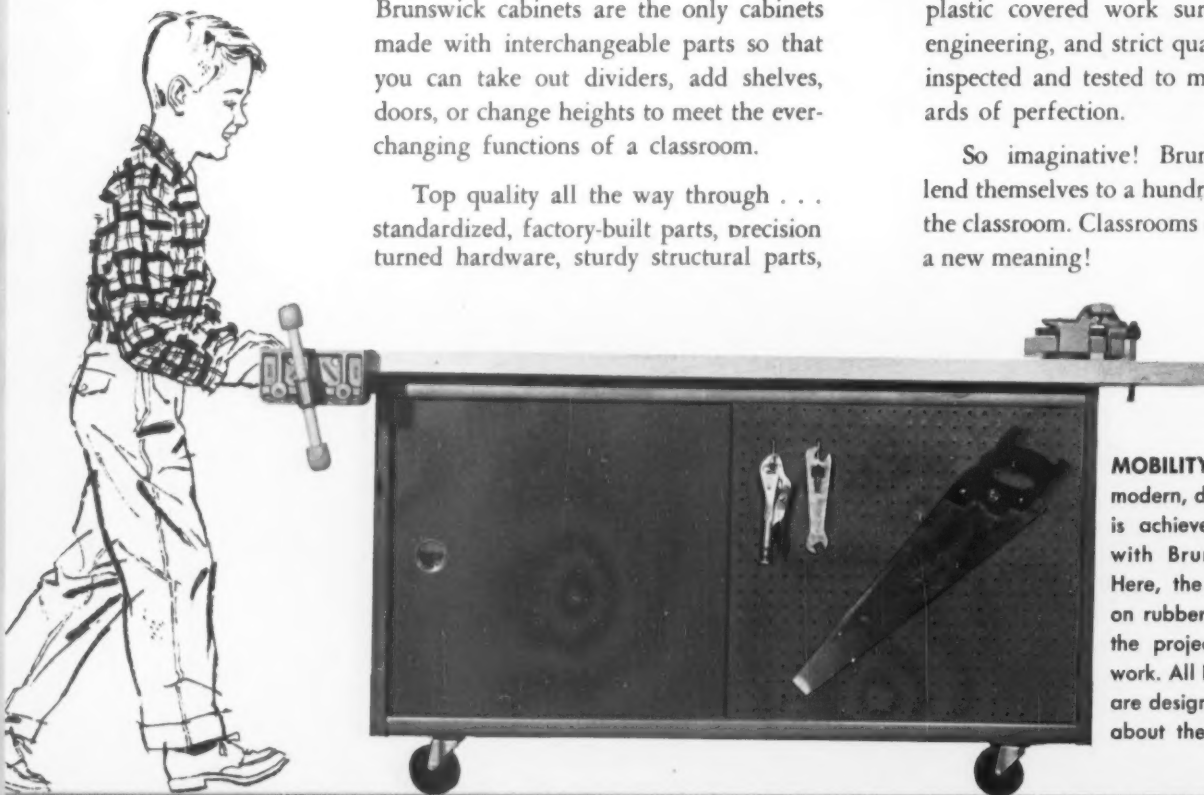
CABINETS!

Brunswick cabinets are the only cabinets made with interchangeable parts so that you can take out dividers, add shelves, doors, or change heights to meet the ever-changing functions of a classroom.

Top quality all the way through . . . standardized, factory-built parts, precision turned hardware, sturdy structural parts,

plastic covered work surfaces, precision engineering, and strict quality control . . . inspected and tested to meet rigid standards of perfection.

So imaginative! Brunswick cabinets lend themselves to a hundred uses through the classroom. Classrooms come alive with a new meaning!

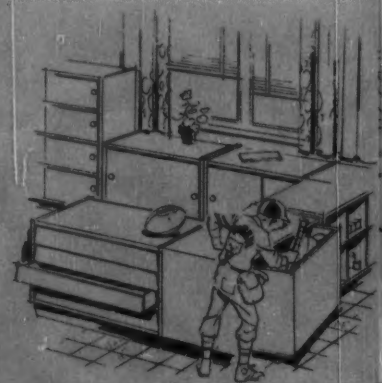


MOBILITY, the keystone of modern, dynamic education, is achieved silently, easily with Brunswick cabinets. Here, the craftwork bench, on rubber casters, rolls into the project area to go to work. All Brunswick cabinets are designed to move freely about the room.



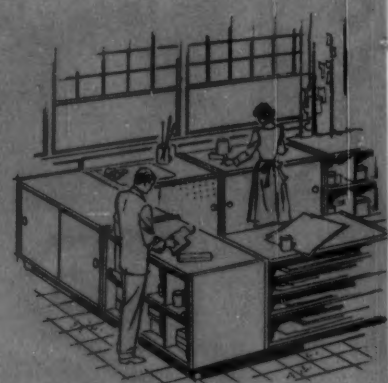
ROOM DIVIDERS. Brunswick cabinets are ideal for dividing the classroom into semi-private group project areas, student-teacher consultation, play or rest areas with privacy controlled by number and heights of cabinets used.

ATTRACTIVE STORAGE. Anything that requires storage can be kept in Brunswick cabinets — neat, clean, orderly and easily accessible. The colors are fun to live with . . . soft gray highlighted with coral, blue and yellow.



WALL CABINETS. Store books and materials handy overhead. Excellent for display purposes. Particularly effective where floor space is at a premium. Vivid door colors add a refreshing decorator touch to the classroom.

WORK SURFACES. Ideal for art, crafts, laboratory, other classroom tasks. Ink, clay and paint-resistant as well as resistant to most acids, the plastic cabinet top surface always retains its luster and color . . . is easy to keep clean.



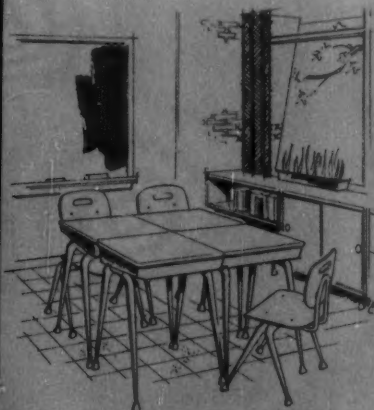
COLORFUL, FUNCTIONAL FURNITURE!

A new dimension in school furniture—a new idea of color and flexibility in the classroom. Brunswick furniture is easily moved around the room for an ever-interesting environment, fits tight together to create big project work space, angles off into horseshoe shape for group discussion, lines up row-on-row for movies or formal learning arrangement.

The tables, desks and combination units *group* together to form any-size work tables. Alternate sizes of tables *nest* one under the other for space-saving storage. Chairs and desks *stack* high and neat to clear an area for group participation. Simple, classic design belies their tremendous strength.

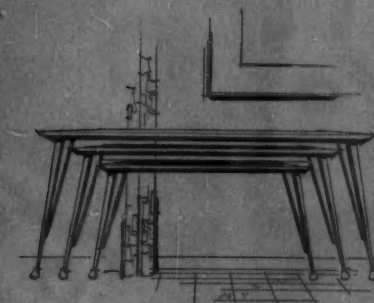
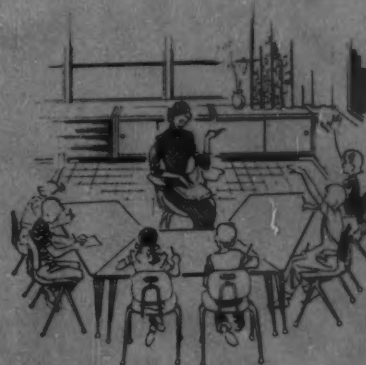
Now, furniture no longer limits the use of the classroom . . . Brunswick furniture *enlarges* classroom adaptability, encourages student creativity and imagination.

FIBERGLASS CHAIRS. What an array of colors . . . what practical chairs! Fiberglass, a wonderful material that keeps its vibrant color, is a breeze to keep sparkling clean, is lightweight yet remarkably sturdy, is resistant to heat, water, food stains, chemicals.



GROUPS. Tables and desks group flush with each other to create large work areas, or discussion tables . . . invite "getting along" during refreshments or reading. Adapts to any activity, takes advantage of proper lighting.

COMFORTABLE. Scientifically designed for comfort. The chairs have compound curves to perfectly match the contours of the body. No cross braces or rods . . . chair legs are away from busy feet . . . makes for easy cleaning.



NESTS. All tables are apronless so students have maximum leg freedom and so that alternate sizes nest — fitting one under the other — to allow space-saving storage yet keep all tables easily accessible within the classroom.

MOVABLE. All Brunswick furniture is movable. The classroom changes character in a minute—becomes a workshop, a rumpus room, a lecture hall, a library, a painter's studio, or the wild frontier as well as a formal classroom.





Brunswick

Let us help you.

There is a Brunswick school equipment specialist ready to serve you anywhere across the nation. Brunswick is represented by many leading school dealers from coast to coast assuring you of prompt, informative service for your school.

Please call on us to show you our complete line of classroom furniture and cabinets. Brunswick specialists can offer many services to you in helping you select the proper equipment, making technical room equipment layouts, and furnishing price quotation information.

OWENS-ILLINOIS

Glass Block and Toplite:



Daylight, free of glare and harsh contrasts, is evenly distributed by Owens-Illinois Glass Block and Toplite Roof Panels throughout this classroom in the McGrath Elementary School, Grand Blanc Township, Grand Blanc, Michigan.

Architect: Warren S. Holmes Co., Lansing, Michigan; Contractor: August B. Johnson Co., Inc.

Progressive educators all over the country are recognizing that *quality*, not *quantity*, of daylight creates better seeing conditions in their schools. That's why they are capitalizing on the exclusive daylighting advantages of Owens-Illinois Glass Block and Toplite Roof Panels.

In hundreds of new and modern-

ized schools, the O-I Glass Block-Toplite team is almost eliminating maintenance costs. Heating and lighting costs are greatly reduced because Glass Block and Toplite insulate and daylight so efficiently. They won't rust or rot like ordinary window sash and skylights . . . never require painting or old-fashioned window shades


the modern team to
daylight
your school!



Owens-Illinois Glass Block and a vision strip keep classroom brightness at comfortable levels, provide excellent vision and ventilation all day long.

. . . are extremely difficult to break.

Planning to remodel or build a new school? Before you start, be sure to investigate the important benefits offered by Owens-Illinois Glass Block and Toplite Roof Panels. For full information, write Kimble Glass Company, subsidiary of Owens-Illinois, Dept. NS-2, Toledo 1, Ohio.

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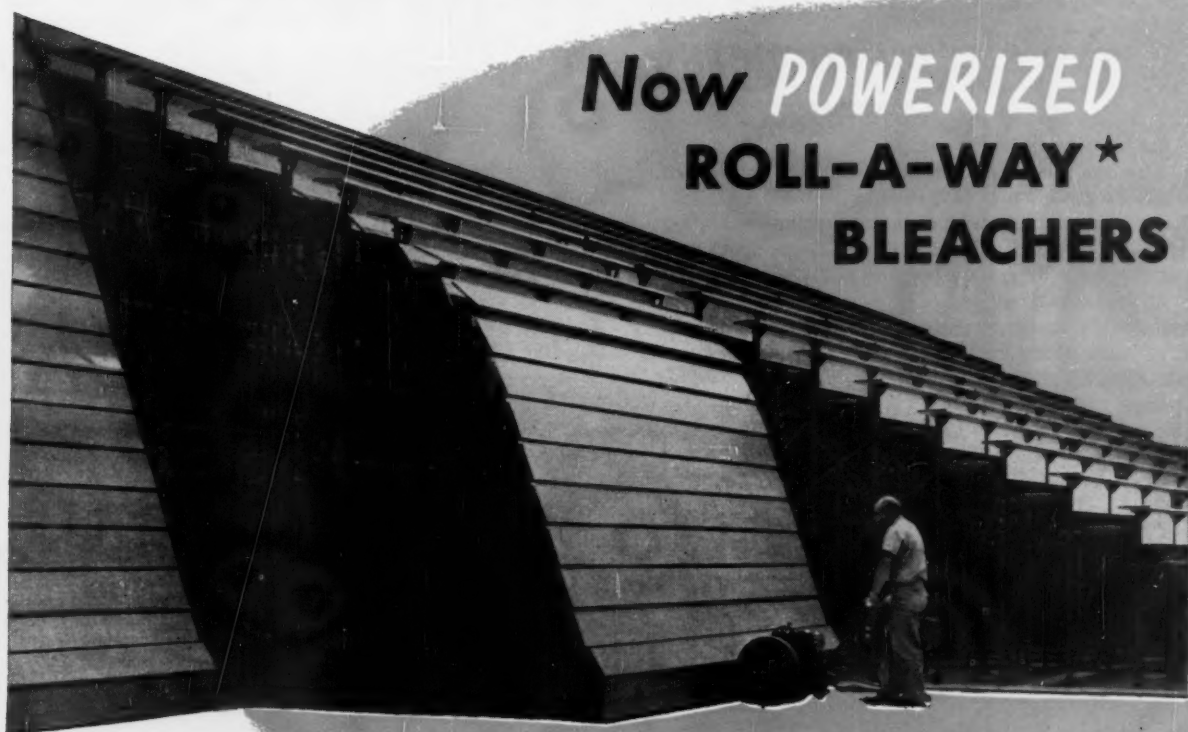
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**Universal's new mobile Poweroller* enables
one man to do all opening and
closing of 10, 15, 20
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This system consists of TRANE Unit Ventilators with *Kinetic Barrier Action*. The TRANE system blends and

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How? By the *Kinetic Barrier Action* that provides powered ventilation across the entire length of outside wall or window. With TRANE Unit Ventilators, you virtually eliminate wasteful overheating, stop cold window drafts. Thus you give *every* child an ideal climate for learning, at the lowest possible cost.

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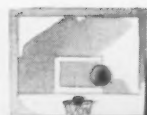


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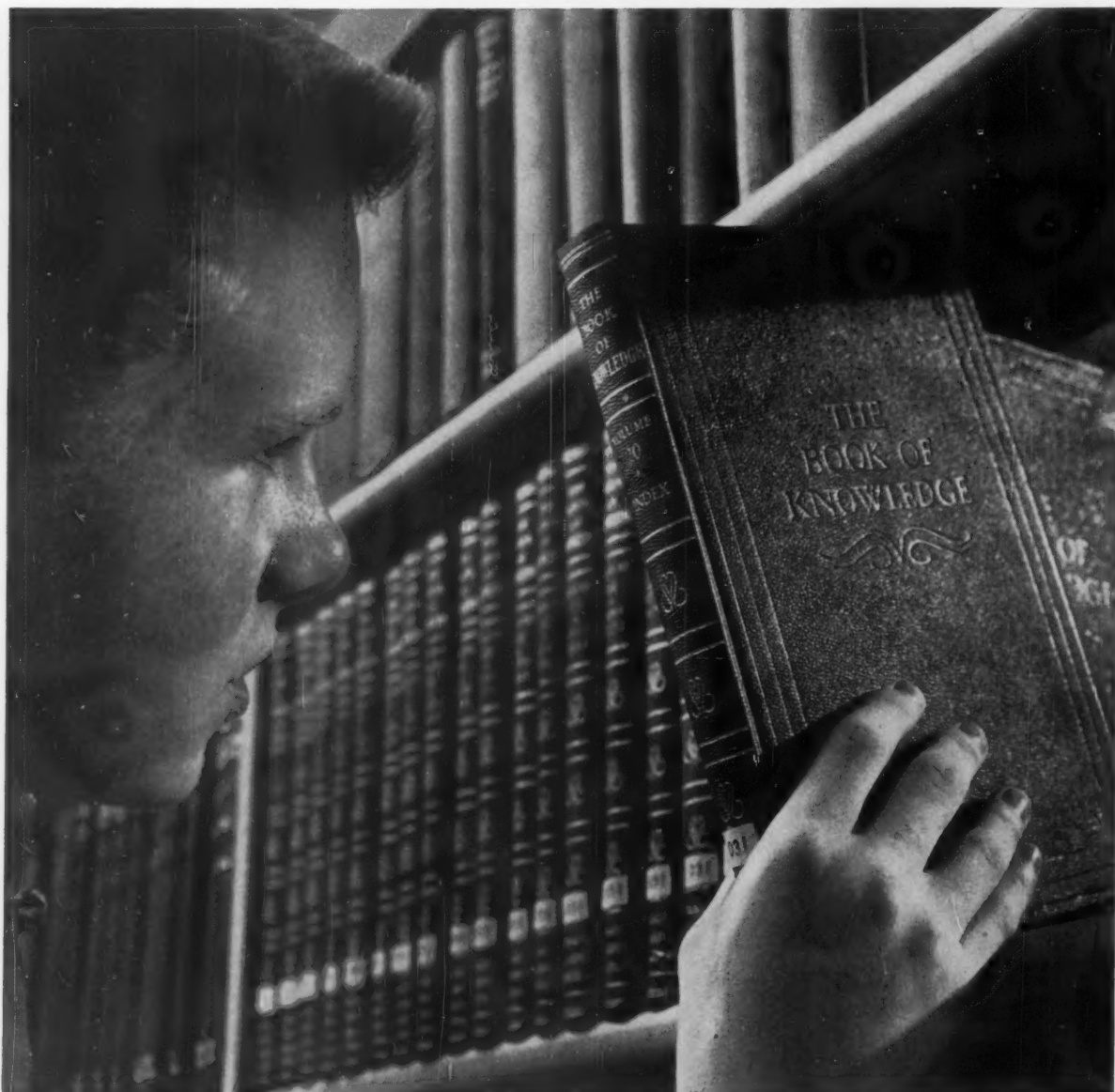
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Looking Forward

So This Is School News!

THERE'S no doubt that schools are very much in the news today, but there is doubt as to whether the press is adequately interpreting public education. A random sampling of what the press is saying about schools (exclusive of athletics) was made by the editor as he traveled to Florida for a holiday vacation.

From a pocketful of clippings gathered en route, the following are offered here as typical examples:

SCHOOLS ANTICIPATING POST-HOLIDAY CROWDING

A story in *The News*, daily newspaper at Sarasota, Fla., dramatized vividly what happens when parents in the North withdraw their children to accompany them on a trip to Florida during the winter months. The article, based upon an interview with Supt. Carl C. Strode, states: "With the reopening of schools, probably the biggest problem facing school officials is the anticipated heavy tourist season enrollments which always reach their peak in January, February and March. Classroom space will be at a premium, and every facility of the schools will be taxed during the peak enrollment period."

When these children return, they require additional help to get readjusted to the hometown program. Some parents who thus interrupt the education of their children will be the first to criticize schools because their Susies and Johnnys are not getting A's.

COLLEGE STUDENT DESCRIBES ESSENTIAL QUALITIES OF TEACHING

Our compliments to Charles Meister, whose by-line appears on a feature in the *Jacksonville Journal*. Mr. Meister wrote a series of interviews with college students home for the holidays. In the article written the day after Christmas he talked with students who are preparing to be teachers.

His interview with Leigh Culley, who is attending Florida State University, presented a philosophy of education that seldom reaches readers of a newspaper. He quoted Miss Culley as follows:

"Unfortunately, when the words 'teacher' and 'teaching' are used, we tend to think that it is what the teacher does that is most important, whereas it is the learning that goes on, hence what the learner does. The function of teaching is to arrange for learning to occur."

"CONSIDERED MOST MODERN, YET SCHOOL ALREADY NEARLY FULL"

This heading on a news story from Naples, Fla., merely verifies the well known fact that new schools are filling up faster than they can be built. What surprised us, however, was the statement of the reporter that "none of the teachers seems to like the idea of having desks and tables loose instead of bolted to the floor."

We're dubious that the reporter really expressed the opinion of all the teachers in this new school in Naples. It is difficult to believe that a "most modern school" would be entirely staffed by regimenting teachers.

SOUNDS FISHY, AND IT REALLY IS

Some of the school patrons in Bonita Springs, Fla., apparently haven't read those textbooks which state that "the public school is a partnership between the home and the state." A news story from this community near Fort Myers, Fla., states:

"There have been two incidents involving the school's principal, Holland Strothers. A cross was burned in his yard, and on another occasion a group of people dumped two large buckets of dead fish and shrimp on his yard. The principal took five shots at the fleeing car with a pistol."

Does this mean that we should now add to courses for school administrators a class in marksmanship?

"AND NEXT YEAR, THERE WILL BE A TREND TO . . ."

This heading for an editorial in the *Florida Times-Union* of Jacksonville suggests that the writer had been somewhat amused by the multitude of articles in January publications predicting things to come.

He wrote: "There will be educated guesses by educated people, trending into purely reasoned predictions, based heavily upon hope, and from there to mere mystic mumbo-jumbo. . . . The reason why the mistaken forecasting of experts brings such malicious joy to the average man is because the experts have begun to take themselves seriously. Many of Mr. Average Man's reasoned forecasts have gone astray, because he left out, or didn't have access to, essential

facts. It's heart warming to see that similar essential facts can elude even the mighty."

We suspect that this Jacksonville editorial writer had been trying to read some textbooks on school administration and thus discovered the secret of how to write a book that can be sold for several years without its becoming outdated.

The secret, as he describes it, is this: "The ancient oracles . . . were careful to leave their deity-prompted babblings open to many interpretations. No matter what happened, they could say 'I told you so. . . .' Some of their modern and supposedly scientific brethren seem to have caught the idea."

HIGH SCHOOL BAND DIRECTOR BEATEN BY PROSEGREGATIONISTS

Throughout the South, there were many newspaper stories pertaining to violent activities of pro-segregationists. It should be remembered that newspapers tend to play up violence, overlooking quiet, constructive activities that are not defined as news.

Disturbing to some citizens in the South as well as to northern visitors was the treatment given Guy Hutchins, 52, high school band director at Camden, S.C. According to newspaper reports, Mr. Hutchins was tied to a tree and beaten and also told that his house would be burned if the family did not leave town. (Police protection was set up for Mr. Hutchins at the hospital and for his home.)

States the news article: "Hutchins said the men accused him of making prointegration remarks in a talk to a Lions Club auxiliary. Hutchins said he made no prointegration remarks anywhere. Lions officials said there has been no auxiliary for several years."

CONSIDERS PRIVATE SCHOOL AN "UNPLEASANT THOUGHT"

"It's not a pleasant thought," writes the associate editor of the *Evansville Press*, Evansville, Ind., "but a system of private preparatory schools is the only alternative" if the public high school doesn't prepare students for college. This statement concludes a series of six articles by Ed Klingler in which he re-roasts old chestnuts about the alleged failure of schools to produce "scientists and engineers fast enough to meet today's needs."

Is it only a coincidence that others who argue for loading the high school curriculum with traditional academic subjects (Arthur Bestor, et al.) also end with the conclusion that the private school is probably the solution?

Mr. Klingler, why do you refer to the private school as an "unpleasant thought"? The *private* school has a very important place in our democratic society. If the curriculum of the public schools is, in your judgment, too broad in its attempts to serve all the children of all the people and not merely those who go to college, it's the privilege and function of the *private* school to offer highly specialized or experimental instruction.

A "GIRLIE" CALENDAR FOR SUGARTOWN'S SUPERINTENDENT

A number of Florida newspapers featured a "girlie" calendar for 1957 that the school superintendent can safely display in his office if he chooses to do so. The models for the calendar were not the overglamourized *Esquire* or Varga girls but lovely coeds of high schools and universities within the area served by the newspaper. We're sending a copy of the calendar to the superintendent of Sugartown.

Santa Swelters Under Palm Trees

AS WE drove through the semi-tropical areas of Florida during the holiday season, we were greeted again and again with life-size statues of Santa Claus poised under palm trees or against a background of flowers. It seemed rather ridiculous to see a full-grown adult as wise as Santa Claus wearing that heavy red suit trimmed in fur as he absorbed Florida sunshine. If young children believe that Santa visits Florida in that North Pole garb, they sooner or later will come to the conclusion that Mr. Claus is rather wacky.

We're surprised that some publicity seeking chamber of commerce or a prominent manufacturer of bathing suits hasn't fashioned for Santa Claus more suitable attire for his holiday visits to the sunny South.

Western Leadership Recognized

IT IS indeed appropriate that Western competence in school administration is recognized in the selection of C. C. Trillingham as president-elect of the American Association of School Administrators. "Trilly" also represents the Midwest. He is a Hoosier by birth, a product of public schools in Oklahoma and Kansas, and a former teacher, principal and superintendent for nine years in Kansas.

As superintendent of Los Angeles County, Dr. Trillingham administers a tremendously large and important unit of California's school system. We had the privilege of visiting his office a short time ago, and we observed with great admiration the educational leadership and the many auxiliary services that his office provides for schools outside the Los Angeles city school district. At the same time we learned that the county superintendent's office is virtually a branch of the state department of education for many accounting services.

The new president-elect enjoys a well deserved popularity not only among his fellow educators in California but throughout the nation. If you've wondered about the initials, the first "C" stands for Clinton (also the name of his birthplace in Indiana) and the second "C" for Conroy.

Congratulations, Clinton Conroy!

The Editor

The NATION'S SCHOOLS

INSTRUCTIONAL LEADERSHIP COMES FIRST

JAMES H. WILLIAMS

Superintendent of Schools, Glendale, Calif.

THE rôle of the school administrator in the instructional program is one of educational leadership. But what is meant by educational leadership? Is educational leadership synonymous with effective administration, or are the two different and separate characteristics?

For my purpose here the thesis is taken that effective administration and effective educational leadership are *different* entities, although they are related. A school system, to serve the maximum purpose for which it is intended, must be well administered but it must also contain the elements of educational leadership.

It is assumed that the so-called successful school administrator gives effective educational leadership to the school system which he serves. In recent years, however, there appears to be an increasing awareness of the importance of a direct contribution on the part of the school administrator to the improvement of the instructional program. This would seem to apply to all administrators—principals, staff administrators, and the superintendent.

It may be argued that this awareness has always been present and that administrators have always made a direct contribution to the instructional program. However, there is logic in the observation that, as the modern-day school system becomes more complex and the total array of responsibilities which an administrator must handle becomes larger, the tendency is to delegate responsibility for the direction and supervision of the instructional program. In principle this is correct, of course, for it is impossible for an administrator to meet his responsibilities in a large school system through any procedure other than intelligent delegation of duties. Conversely, however, it is wrong in prin-

ciple to delegate responsibilities so completely that the administrator loses contact with that which he has delegated.

Through the process of delegation it is easy for a superintendent of schools, or a school principal for that matter, to lose contact and thereby to lose interest in instruction and instructional procedures. If one accepts this premise as one of the realistic outcomes of administering a modern-day school system, he must inevitably be awakened to the danger that lies in this separation of administrative leadership from a certain amount of direct participation in those activities which make definite contributions to the improvement and the enrichment of the learning atmosphere in our schools.

What are the contributions that should be expected from the administrator? It will be maintained by some that educational leadership and the ability to administer a school system are synonymous. However, a contrary point of view on this matter would appear to be justified. There are examples of well run or well operated schools or school systems which appear to lack a desired quality of educational leadership. It is true that some school systems, even though educational leadership may be lacking, prove to be educationally productive simply because the natural force of a core of dedicated teachers will produce effective educational results despite the quality of leadership present.

On the other hand, it seems apparent that, if a school system has the benefit of an effective administration that possesses also a high degree of educational leadership, the results will be greatly improved. If the premise is accepted that educational leadership and effective administrative practice are separate characteristics, both of

which are not always found in a school administrator, it must follow logically that the nature of educational leadership can and should be identified.

What is the basic characteristic of educational leadership? It may be suggested that an educational leader primarily must have an abiding interest in education and not just an interest in administering an educational program. He must have a specific interest in seeing boys and girls learn and in studying the activities through which they learn and an understanding of the most effective procedures used in conducting effective learning activities. He must be sensitive to teacher needs and teacher problems. He must exhibit a concern for the true elements of teacher morale, for a school system will not rise beyond the general level of the enthusiasm exhibited by the teachers.

How can the administrator influence the instructional program? One of the practical problems faced by a school administrator, and this applies particularly to a superintendent of schools, is to devise some method of communicating his own thinking to the teaching staff and in turn to receive the thinking of the teachers. A superintendent's opportunity for direct contact with a large number of teachers is more or less nonexistent. It is possible that the future, through the medium of radio and television, holds some opportunities not thus far used to any appreciable extent, but at the present time in most large school systems the superintendent must contact his teachers either in general convocations or through the building principal.

One or two general meetings per year of teachers in systems that have not grown so large as to make this impossible are perhaps worth while. Such meetings do give teachers an

opportunity to see and hear directly from the superintendent of schools. By the same token, the superintendent undoubtedly gains inspiration and a certain amount of insight from this kind of meeting. This can do nothing more, however, than serve as a general type of communication. The more specific contacts must be made in an indirect manner, and the most effective way of doing this is through the building principal.

Superintendents of schools should seriously weigh the possible effects before they delegate the responsibility of principals meetings to staff administrators, for when this is done the superintendent loses his last and most effective opportunity to communicate with the people most directly associated with teachers and the instructional program. It is not imperative that a superintendent serve as chairman of his principals meetings, but he should attend all of them, and he should be an active participant in the discussions that take place there.

The superintendent should make certain that the major portion of time given to principals meetings is devoted to constructive discussion of educational problems. In this way he can influence the nature of the discussions, and he can exhibit to the building administrators his philosophy of education and his interest in various phases of the teaching program. By so doing, he can add status to the instructional program.

This contact between superintendent and principals offers the best opportunity available for the improvement of educational leadership on the part of building administrators. It would be difficult to overestimate the importance of this, for it is believed that *the rôle of a building principal in the instructional program is paramount*. Again, it may be stated that a school which is staffed with superior teachers may produce an excellent instructional program despite the principal, but it follows logically that the effectiveness of a given school cannot rise much beyond the level of educational leadership given by the building principal.

By direct contact with the building principals, the superintendent has opportunity to create an educational tone and to set the pattern for the type of meetings that principals will in turn conduct with their respective teacher groups. Through this rather direct line of communication, teachers will soon

become aware of the importance placed on instruction and they will come to know of the superintendent's educational philosophy and the degree of interest he actually has in producing and maintaining an effective learning situation in the schools.

What do teachers expect of an administrator? Too many school administrators are so far removed from the teachers that they are almost certain to receive a certain amount of routine criticism. This applies particularly to the superintendent. This criticism is partially the result of basic human nature but perhaps is due more to a lack of proper communication. Many things that a superintendent does, or is purported to have done, in the administration of a school system are not understood or are misunderstood. This, of course, results in some criticism. Perhaps this can never be entirely alleviated, but it should be reduced as much as possible.

Aside from this routine sort of criticism, there would appear to be two rather basic comments that teachers make about school superintendents and sometimes about school principals which may have some validity. Many of the teachers do not believe that school superintendents have an interest in everyday teaching problems, and in a good many instances they doubt that the school superintendent understands classroom procedures.

In overcoming these difficulties the school administrator must ask himself some serious questions with reference to these teacher points of view: Am I really interested in instruction? If I am not, why? Did I once have an interest in instruction, and have I lost it? If so, why? Do I really understand the basic concepts involved in the latest teaching methods? Have I failed to keep abreast of current educational thinking?

It is easy for a busy administrator, even the building principal, to allow other seemingly more urgent responsibilities to crowd his daily schedule to such an extent that he never gives attention to a study of the latest thinking as it relates to teachers and teaching problems. How then can the superintendent and other administrators find a solution to this problem?

Evaluate the daily schedule. It is not easy for the administrator to overcome this problem, but, when he becomes its victim, it can be remedied

only by the same method one uses to find time to see his doctor or dentist. The administrator must realistically evaluate his daily schedule, and somehow he must find time each day for a certain amount of activity which is related directly to the improvement of the instructional program and to self-improvement in the area of educational leadership.

Many school superintendents—and again this would apply in many instances to building principals and staff administrators—would profit by a careful evaluation of their daily programs. In making this evaluation, they might ask: "Am I delegating a sufficient number of functions, and am I delegating the proper functions?"

On his schedule the administrator must list principals meetings and certain staff and teacher group meetings which will be devoted to instruction, and he must hold these appointments to be as necessary as he would a meeting of the board of education.

Allow a certain amount of time for professional reading. This may be only a few minutes per day, but a few minutes each day amounts to considerable time during a school year. Professional reading can be easily crowded completely out of the schedule unless positive action is taken to see that it remains on the daily program. Frankly, it gets down to the serious business of self-discipline.

History reveals that successful leaders in all fields of endeavor have exercised considerable discipline with reference to work habits and that they have exhibited care in selecting the items to which their energies were devoted. They have been people who put first things first and applied themselves wholeheartedly to the items of larger importance. The successful school administrator who emerges as an effective educational leader will undoubtedly find his answer in this same pattern of work and thinking.

It may be concluded confidently that the people who support public and private education are interested primarily in the effectiveness of the educational program, for it is the children of these citizens who are the recipients of this program. It is logical and correct for them to look to their school administrators to provide the leadership necessary to ensure an effective program. We may rest assured that they will make and enforce that demand on us. #

At the Jane A. Neil School, Chicago, the handicapped and the nonhandicapped children work together in the student council.



Special Needs Dictate Design of School for Physically Handicapped

FRANCES A. MULLEN

*Assistant Superintendent in Charge of Special Education
Chicago Public Schools*

JUST about everyone qualified to venture an opinion on the subject was consulted during the planning of the Jane A. Neil School for Physically Handicapped Children, which opened in Chicago last September.

Four years of concentrated study preceded actual construction. It embraced an investigation of plans of many other cities, the previous experiences of the architect in building and remodeling special schools of this type, and the knowledge of teachers and therapists who understood the needs of youngsters with orthopedic, cardiac and other physical impairments. Two committees of physicians went over the plans in detailed conferences.

Both handicapped and nonhandi-

capped children are provided for under one roof at the 275 pupil Neil School. Classes are separate, but joint use is made of the auditorium, library, gymnasium, lunchroom and other larger facilities. The dual arrangement is in keeping with the views of administrators that grouping benefits both types of pupils.

Under this plan, nonhandicapped children learn responsibility as they take charge of wheel chairs at fire drill. They are stimulated to greater effort when they see what is accomplished scholastically by pupils who repeatedly have had operations with resulting loss of school time. They are cheered in the face of their own troubles by the contagious friendliness and cheer-

fulness of the lad in huge and clumsy braces or by the gaiety of the girl playing modified basketball from her wheel chair.

The handicapped, too, gain psychologically and socially from daily contact with healthy youngsters who have learned to treat them as equals, respecting them for the things they can do without thinking about the things they cannot do. Both types of pupils gain from the richer library and other shared facilities that can be provided economically in an integrated facility.

Nonhandicapped pupils occupy the west wing of Neil School, the handicapped the remainder of the building. Should the success of the Salk vaccine

and other immunization measures reduce the number of children with physical impairments, the flexible space arrangement will permit conversion of classrooms to regular school purposes. On the other hand, should the facilities become inadequate, the present U-shaped building can be enlarged into a complete square around a closed court, the building plans having anticipated further site development.

To understand the type of building required to serve physically handicapped children, one must have some idea of their problems.

Of Chicago's special pupils in elementary schools, 35 per cent are handicapped because of cerebral palsy, 20 per cent because of poliomyelitis, and 10 per cent because of severe cardiac conditions. The other 35 per cent are handicapped because of a wide variety

of causes. Many children falling medically into one or the other of these classifications attend their regular neighborhood schools. Some are homebound.

What facilities and services, then, would it be impracticable or impossible to furnish in the home school? The answers to this question became the starting point for the architectural planning of Jane A. Neil School.

GETTING TO SCHOOL

Access. Some handicapped children need bus transportation to and from school. This group includes children in wheel chairs and some on crutches. It includes a few children with severe heart conditions who should not walk any distance or struggle with rush hour public transportation. It includes the children who need much protection: hemophiliacs who bleed at the slightest accident and those with brittle bones that break easily. It includes children who might get to school without help on a good day but could not do so when streets are icy.

Architecturally, this means a bus loading platform—covered to protect it from snow, ice and rain and large enough so that at least one-third of the buses can unload simultaneously. With less space, some pupils would have to come to school early, while others would be late for class, as unloading the crippled is a slow operation. It means an anteroom—with space to line up wheel chairs or walkers and with doors closing the area off from the outdoor platform and main school corridor, so that the entire building will not be chilled. It means toilet and rest facilities for the bus drivers. It means outside ramps for children brought to school by private car or taxi and for handicapped adults who participate in the school's community program.

Freedom of Movement. To enable

handicapped children to make use of varied facilities, either one-story construction or ramps and elevators are needed. Neil School is on one floor. Wide corridors, smooth floors, wide doorways, wide spaces between seats, wide spaces at the front and rear of classrooms and before the chalkboards, absence of thresholds and door sills, plenty of space in toilet rooms—all these facilitate the handicapped child's movement. Rest stations in the corridors provide recessed benches on which a child can rest if the block-long corridor proves too arduous.

Auditorium. To permit handicapped children to participate in auditorium activities, the stage must be designed with two ramps at not too steep a pitch, so that pupils may move on or off the stage from either side. In Neil School, one ramp from the corridor leads across the back of the stage to provide a stage entrance on the far side. On the corridor side a ramp leads from the rear of the stage down into the audience area. The height of the stage must be watched, lest the ramps become too steep. Because of the low stage, the space beneath cannot be used for seat storage, so closet storage space is provided.

CLASSROOMS CAREFULLY PLANNED

Classroom Space. In Neil School, classrooms were planned for from 15 to 20 pupils. The rooms are 26 by 38 feet. Authorities agree that three times the usual floor space should be allocated to the physically handicapped pupil. This will enable children in wheel chairs to move easily from one work center in the room to another, and will prevent those with uncontrolled movements from interfering with their neighbors. Extra wide desk tables permit the handicapped child to have more of his work materials within reach and lessen the danger of



Above: A ramp gives access to the stage. Four years of study preceding building of the school resulted in the ramp and other features that make school life pleasant and activity possible for the physically handicapped.

Right: The bus loading platform is covered for protection from snow, ice and rain. It is large enough so that one-third of the buses can unload simultaneously.





the spastic child's pushing his books and supplies to the floor in the surplus motions that often accompany his attempts to function.

Self-Help. At Neil School railings are provided in corridors, at the chalk tray and vertically at the side of the chalkboards, and at toilet stalls to enable as many pupils as possible to care for themselves.

Toilet stalls are large and have automatically operated doors to increase the number who can help themselves. Toilet rooms are large enough to give the pupil maneuverability. They are located close to classrooms, and for the youngest pupils are directly accessible.

Wardrobe and cupboard doors in the classroom slide sideways rather than swing outward. The child on crutches or in a wheel chair, or unstable in his balance, may have much difficulty with a swinging door; but he is able to put away his own coat or find the classroom supplies he needs if a door can be pushed to slide sideways at a light touch.

Attendants. Even with the building facilities indicated, some pupils cannot care for their own needs. Attendants must be made available to push wheel chairs, dress and undress children, take them to toilets, and feed them. Use of attendants decreases the number of children condemned to an isolated life at home. An attendant service means that children with severe handicaps resulting from cerebral palsy or paralysis, children learning to use an artificial arm or leg, and children



born without arms can come to school. Yet attendants require dressing rooms and the presence of more severely handicapped children necessitates space for dressing tables in the toilet rooms and more space per pupil in the lunchroom.

Protection. Physicians who would be afraid to allow certain children—bleeders, those with brittle bones, the epileptic—to attend a school not equipped with special facilities ap-

prove attendance where special precautions are taken. Because attendants and physical therapists are available to give aid in emergency, because enrollment is low while the corridors are wide, because class size is small while the rooms are large, because restrooms are provided, school attendance becomes relatively safe for these youngsters.

Architecturally, the special protective provisions suggest: walls spread-

Above: Physical education teachers, trained and experienced in work with the handicapped, have adapted many exercises and sports to the Neil School youngsters. Ball games are made exciting fun for teams in wheel chairs and on crutches. Below: The school has a speech clinic and a full-time therapist who with the aid of a mirror here demonstrates various lip formations which will help correct child's speech difficulties.

ing obliquely from room entrances; classroom areas increased to allow for parking wheel chairs and other equipment where they will not be a hazard to the movement of fellow pupils; adequate restrooms with cots; adequate first-aid equipment; a wide variety of special furniture, and equipment adapted to unique problems.

THERAPY AND PLAY

Physical Therapy. Many youngsters need extensive physical therapy. This group includes particularly post-polio cases, amputees learning to use prostheses, the cerebral palsied whose first steps are such a triumph. Chicago provides this service through registered physical therapists working in the school, under the orders of the family physician. The therapists interpret the child's physical needs to classroom teachers on a close and personal basis. They may help the teacher decide how much pressure to put on a particular child for academic achievement, suggest his need for particular experiences in the arts, crafts, shop or gymnasium programs to strengthen particular muscles, and devise techniques by which the child can surmount his handicap in classroom activities.

Chicago provides one physical therapist for each 50 physically handicapped children, along with physical therapy facilities. Neil School has two treatment rooms equipped for many varieties of exercise. There are treatment booths, a whirlpool bath and Hubbard tank, and a small swimming pool with hoist lift on an overhead trolley, so that a helpless child can be dressed on a table at the pool side, then lifted and placed in the water at the appropriate depth. The pool is adequate also

for recreational swimming and splashing by a group of not more than six small children.

Adapted Physical Education. Ingenious teachers of physical education, with training and experience in work with the handicapped, give full consideration to each child's limitations and potentialities. They adapt a surprising variety of exercises and sports to these youngsters. Ball games are made exciting fun for teams in wheel chairs and on crutches. The crutches fly, artificial legs thump, and braces squeak when the square dancers get enthusiastic. Field day brings out a weird assortment of special races and field events, but muscles are hardening while life takes on more fun for these handicapped children.

Architecturally, this service means that a good sized gymnasium is needed. In Neil School a combination gymnasium and auditorium sees much use. In addition, the 20 by 56 foot receiving room provides space for recreational therapy when buses are not loading and unloading.

Outdoor Play. In a regular school, because of stairs, distance or a rough playground, the handicapped child remains behind at recess while the class goes outdoors. In Neil School the lower grades have direct access to an asphalt surfaced outdoor play space, which is 6 inches below floor level. These play areas, fenced and hedged for privacy, become outdoor extensions of all classrooms with south and east exposures. For the older pupils there is an extensive playground area covered with black top, also 6 inches below floor level.

Personal and Social Guidance. In any group of physically handicapped

pupils there is a higher percentage of youngsters with emotional difficulties, and more parents wanting advice on discipline and management, than in a comparable group of nonhandicapped children. Many community agencies are working with these children and their parents, and their representatives want information and cooperation from the school. The state rehabilitation services, for example, begin to plan with the older youngsters their futures even before they become formally eligible for rehabilitation.

All these considerations dictate even for the small school a suite of offices for psychologists and guidance workers. Three such clinic rooms are provided in Neil School, each with running water, cupboard space, and electric outlets. Each is large enough to be used for individual conferences or for small group meetings.

Speech Therapy. A physically handicapped group will include a large number of children with severe speech difficulties. Some pupils have organic defects of the speech mechanism or neurological impairment of the speech function. The protected life the child may have led at home sometimes results in immature speech, poor speech habits, or faulty voice habits. A speech clinic and a full-time speech therapist are necessities. The clinic should have a mirror and running water and should be large enough for therapists to work with small groups of children and for joint interviews with parents and professional workers.

Psychological Services. Psychological services in diagnosis, counseling and therapy are more necessary in the special school. Architecturally, this calls for another attractive clinic room, soundproofed and with running water and adequate waiting space.

STRICT ECONOMY ATTAINED

Costs. Though many special features were incorporated in the Jane A. Neil School for Physically Handicapped Children, strict economy was attained in the architectural planning. Contracts totaled \$740,921—95½ cents per cubic foot, or \$16.61 per square foot. These figures are below the cost of recently constructed Chicago school buildings for the nonhandicapped. The per pupil cost of \$2470, is higher than the average because of the controlled smaller enrollment. Yet this figure is modest when the many advantages being provided for the youngsters are considered. #



Specialists consider the needs of each new pupil who enrolls in the Neil School.

School Lunch Provides Many Teaching Opportunities

G. ROBERT KOOPMAN

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FEEDING people in order that they might be in school attendance is an old problem—actually centuries old. Relating this school feeding to the instructional program is also an old problem but one that has been recognized for less than a century. Educators dealing with nursery schools and problems of home and family living recognized this problem decades ago and brought about some solutions within a limited area of endeavor. It was the initiation of the National School Lunch Program that really brought the matter before us as a large problem in school administration.

When the governor of Michigan received the federal proposal the first time, I happened to be the person who made the study of the situation. I made three recommendations:

1. That the department of public instruction accept the responsibility for administering the school lunch program of the public schools.

2. That there should be no federal interference in the operation of the program.

3. That the program should be conceived and administered as a teaching-learning procedure primarily and as a problem in food service secondarily.

The first of these recommendations was accepted; the second has not been accepted; the third has been neither accepted nor rejected. In fact it seems that the implementation of this last recommendation is just now under serious consideration. By its very nature this recommendation is one that can only be worked out gradually with the many, many individuals and agencies concerned. The important consideration is launching a drive to make the school lunch program primarily a teaching-learning procedure.

Scope and Importance. In 1954, as chairman of a committee for the American School Health Association, I had the privilege of helping to direct a national survey of the school lunch situation. This survey uncovered many aspects of the program, sanitary and otherwise, and laid a basis for (1) correlation studies growing out of the use of the survey instrument, (2) correlative studies of special areas disclosed by survey results, and (3) comparative studies growing out of work of other research groups. It highlighted the fact "that the school lunch operation is a huge, cooperative undertaking with serious and important health and

educational implications for the lay persons and the professions concerned."¹

The educational implications of an activity that in 1955-56 served, in round numbers, 1.8 billion lunches to 10.6 million children in 56,000 participating schools exclusive of the "special milk program" are apparent. In terms of ratios this means that three out of 10 children in the 5 to 17 age group participate in the school lunch program as nationally defined.

In Michigan alone 37 million lunches and 76 million milk servings were delivered through the official program. With reference for the future we note that 70 per cent of the blueprints for school buildings being approved in Michigan include kitchen facilities.

With these facts in mind one wonders how any citizen, school board member, administrator or teacher can ignore the educational problem that is involved in the school lunch program.

From an address prepared for the American School Food Service Association convention in Chicago, Oct. 25, 1956.

¹Committee on School Lunch Program of American School Health Association: American School Health Association Surveys School Lunch Operations, *Journal of School Health*, 25:35 (February) 1955.

These charts showing food values were planned to accompany a school lunch activity related to the village-farm unit that is depicted in the murals.



Sensitivity to the problem of learning. Two school visits shine out in memory as I look back upon the period before the advent of the national program.

Visiting a reorganized school district in a rural area, I asked to eat lunch with the children in a one-room school building. There I partook of a simple warm meal that had been delivered by the school bus driver. The children had long before this created an atmosphere and tradition for the school lunch. Movable desks were pushed together into square blocks, napkins were distributed, and all of the amenities of a good simple meal were observed. The lunch period was brief but relatively unhurried even though the children were eager to get to their game of "one old cat." The teacher had little to do with the activity which she had created but seemed alert to the learning and the mental hygiene possibilities in the situation. All of these good things were taken for granted as they should have been.

Another visit was to a ninth grade core class in a city school. At noon I was served a lunch which the children had prepared after studying nutrition and meal serving. My hostesses at a small table for four were very conscious of the problem of good manners and of the problem of carrying on an interesting conversation involving everyone present. The lunch was appropriate in every respect, although simple. The participants knew what they were getting out of the situation, including the relations of the activity to the science of nutrition, to social education, and to oral English, all of which matters were of concern to this core class.

Here are two simple illustrations that may indicate the educational values involved.

Textbooks only touch the problem. A quick survey of a number of leading school textbooks in health education yields a few references to the school lunch, but virtually nothing about the utilization of the lunch as a learning laboratory. Possibly it is too soon to expect the textbooks to deal adequately with this problem.

One of the needs is to interest administrators in the instructional aspects of the school lunch. A survey of leading professional magazines for administrators brings up quite a few articles. Several of these grew out of the national school lunch survey previously

discussed, but more grew out of the leadership of the editorial staffs.

It should not, however, be concluded that, because there are teachers, specialists and administrators here and there who sense the problem, a study of normative practice would reveal an acceptable set of principles and practices. In fact, many instructional people feel that good teaching-learning procedures are seldom associated with the school lunch activity. This situation presents a challenge.

Rôles of health specialists are not clear. There is no evidence that the instructional rôles of the school nurse and other health service specialists have been clarified. Mildred Coyle in an article entitled "School Nurse's Rôle in Lunch Program"² has given a fine set of recommendations covering the rôle of one health specialist.

Curriculum plans seldom cover the problem. Few schools have careful plans covering incidental and subject matter teaching of health which capitalize on the school lunch situation. This is not to say that there are not many plans covering health instruction and nutrition education. The void is in plans that actually capitalize upon the opportunities inherent in the school lunch situation.

A review of the reports of state directors of school lunch programs indicates that the leadership in about 60 per cent of the states lists curriculum implications of the school lunch program as a major problem. One suspects that if queried more than 60 per cent of the state directors would give this problem a high priority. The terminology in the state reports is interesting and implies some rather keen insights, e.g. "acceptance of school lunch as a part of the over-all program of the school," "of the total program of education," "source of class activities," "lunchroom as another classroom," "total plan for the school day." Apparently there are a sensitivity and a feeling of need among those responsible for the administration of school lunch programs.

Major Aspects. The problem itself is divisible into two parts—curriculum development and administrative leadership. The first of these starts with conceptualization of the sorts of programs that would be rich in learning

results. This would imply recognition of the fact that the individual's problem of learning is that of perceiving and controlling his environment. The concept must be fairly complete and penetrating. The controlling must be cooperative, pragmatic and satisfying. Too often the activity is treated as simple feeding. It seems better to think of feeding as an activity associated with pigs and geese, but man as a self-purposing organism eats selectively and learns from his eating experiences in order to live more profitably and richly.

An elementary school consultant, when asked about the school lunch program, indicated that he had learned to avoid it because of the smells, the mass feeding, and the negative climate that usually prevails. This is a terrible indictment. This simply indicates that the school lunch program is too often a managerial cousin or orphan of both the administration and the instructional program.

On the positive side, however, there are indications in the literature that in one small town the school lunch is a community project having both economic and learning proportions. In a large southern city the school nurse regularly helps elementary teachers to use the health service data and the knowledge of the nurse in planning instructional units. One writer gives an excellent example in the field of social education in showing how a Chinese boy faced with a strange dish of macaroni and cheese receives an addition to his social education. Feelings about food are important.

The nursery school has been an excellent laboratory for curriculum specialists even though it remains an orphan in most cases. Here the home economists have for many years experienced the importance of attitude formation at an early age. Eating habits are notoriously cultural. Displaced persons have been known to starve when surrounded with foods considered rich and satisfying by persons of other cultures. Farmers often move to cities and to sedentary occupations without knowing how to change their diets. Retired people often develop serious problems of a dietary nature. This certainly indicates a great opportunity for experiences in the field of personal living and cultural adjustment. What programs have been set up to deal with these problems?

One school lunch supervisor points out that the school lunch laboratory

²Coyle, Mildred S.: School Nurse's Rôle in Lunch Program, *The Nation's Schools*, 57:106 (April) 1956.

has resources for the teaching of science, business, social education, home and family living, and health. There are electric mixers that have gears and pulleys. There are stoves and refrigerators that illustrate the principles of physics. There are choices to be made. There are meals to be planned and cooked. There are dishes to be made sanitary. There are flies to be kept out. There are tremendous opportunities for creating climates favorable to growth and to good mental health.

One major problem then is making the school lunch activity a teaching-learning situation. Good schools seek through student government activities and cooperative faculty work to treat all of the activities that go on in a school as curricular activities. The curriculum is to the learner his environment in motion—his environment as he is perceiving it anew each day. Thus the school lunch should be made an integral part of the school day.

Planning Teaching-Learning Procedures. Integrating school lunch into the curriculum does not necessarily mean integrated curriculums. Different schools have different instructional policies. Some teach departmentally, some teach through departmental and integrated activities. Integrated activities associated with the school lunch would be similar to student government and safety patrol projects in an elementary school having self-contained rooms. At the secondary level integration takes place when a core class takes responsibility for the school lunch or when all departments join in utilizing the lunchroom as a learning laboratory. But the important issue is that of getting some attention, departmental or otherwise, to the learning problem involved. True, integrated programs of high quality will be more effective than any others in the long run. *The axis for action is from learner needs to appropriately planned teaching-learning procedures in the classroom and lunchroom.*

Developing school policy. Any state or school system that studies the problem will soon generalize its plans of action under some policy. The state curriculum committee on health education in Michigan consulted expert opinion and developed a recommended policy statement or guide for schools that will serve as an excellent illustration.

"Statement of Policy on the Function of the School Lunch in the Total



In this classroom a school lunch related unit culminated in a tasting operation.

Educational Program: The federal program was established with the objective of improving the nutrition of the school child by means of a school feeding program integrated into the educational system of the school. Nutrition surveys in the last few years have not shown marked improvement in the nutrition of the child as a result of the school feeding program except in a few isolated communities with children who have never had a sufficient total quantity of food and for whom any additional amount of food would mean an improved nutrition. In some areas, the nutrition of the child has actually suffered because of a lesser responsibility on the part of the parent for providing adequate meals at other times during the day and because the child with food dislikes and a limited appetite has received little encouragement in consuming the noon meal.

"The key problem in the school lunch at this time is to integrate a feeding program into the educational program of the school so that the lunch becomes something more than an imposed feeding operation.

"The school attempts to prepare boys and girls to be self-supporting, independent thinking individuals capable of making decisions in all areas of living. In the case of the school lunch, these decisions concern health of which diet and food habits are a very important part. In addition, most people spend a large percentage of their earnings for food. It is important, therefore, for them to learn how to spend this money wisely. The school lunch seems to offer a place where these things can be taught in their natural

setting, thus dignifying the lunch program as an educational function rather than a business operation.

"Although final responsibility for school feeding lies with the administrator, the teaching staff, pupils, school lunch personnel, and the community should have an interest in and a rôle to play in the program. Goals of the school lunch program and the means of realizing these goals will vary with each community. There are difficulties in integrating the school lunch with the educational function, in that many administrators and teachers received their preparation and early experience at a time when there was no school lunch program or a very limited one. The supervision of the lunch hour is often accepted as an 'extra' in an already full day. The shortage of classroom space and of teachers makes for very little flexibility in schedules where essential subject matter instruction must take first place. The rôle that the school lunch could have in the total school program needs to be understood by the school board, the community, administrators, parents, teachers and students as well as the lunchroom personnel.

"The recommendations of this committee for the development of the school lunch are as follows:

"1. If the complete collaboration of the staff of the school is to be obtained, it will be necessary to include the administration and the guidance of the learning activities of the lunchroom as part of the teacher's regular load with an appropriate adjustment in time.

"A suitable committee structure which will include students as well as

members of the faculty, school lunch personnel, and school administration will make it possible to work out more effective means of supervision of the lunch hour with students themselves taking much of the responsibility for the organization and behavior in the lunchroom. If the relationships within the school are suitable, the governing committee could well include parents, members of the school board, and other interested community members.

"2. The school lunch can be made a more interesting and effective educational instrument if use is made of the classroom teaching opportunities which the school lunch provides. Actual participation in some phase of the school lunch program can be used in the following:

"A. Nutrition requirement for growth.

"B. Opportunity to learn about a variety of foods.

"C. Social amenities.

"D. Personal hygiene and sanitation.

"E. Citizenship training.

"F. Group participation.

"G. Home and family life education.

"H. The geography of food production.

"I. The necessary accounting methods in the operation of the lunchroom.

"Many other opportunities will occur to the alert teacher.

"3. The homemaking teacher because of her professional preparation has qualifications which enable her to take a leadership rôle in the development of policies relative to the school lunch as an educational program."

Administrative leadership for the lunch program. The second part of the problem is that of administrative leadership. Those specialists responsible for the school lunch program should recognize the problem of helping general administrators, instructional specialists, and teachers to understand the problem. Once understood, the matter will be resolved through cooperative educational planning. Student councils and committees, faculty committees, and experimental units should all be utilized.

Status leaders of education such as superintendents and principals usually come originally from some specialized field. Thus one would not expect a readiness for problems for which individuals have no experiential back-

ground. Besides this consideration the administration of school lunch is often a new problem. On-the-job experiences then must be relied on. This means that those especially concerned with the school lunch problem should carefully involve, rather than reject, general administrators and specialists of all kinds.

Administrators and instructional specialists are also responsible for inservice education of staff; therefore they are doubly important. Instructional specialists to be especially considered are the following: (1) curriculum consultants and coordinators and helping teachers, (2) department heads in secondary schools, (3) school psychologists, counselors and visiting teachers, and (4) school health service personnel.

But the nub of the problem is in interesting teachers. Administrative planning should be geared to this objective.

Lay participation is needed. More and more instructional improvement in American schools is being achieved through citizen participation. There is a special reason for parent involvement in the case of the school lunch. Parents are primarily responsible for the feeding and growth of their children. The school has only a supplementary rôle. Thus parents should be involved in the co-planning of the school lunch and deeply involved in guidance of the child in his day-by-day nutrition. In spite of some extravagant claims to the contrary, eating must be considered a daily rather than a midday activity. Routine parent conferences, home visits, and reports of pupil progress should all deal with dietary and nutritional problems when they exist. School lunch problems are "naturals" for parent-teacher association meetings and study club meetings. All that is needed is a little leadership to break the ice.

Proposed actions. It seems wise to close with a set of specific recommendations that might be worth careful study and implementation.

First, it does seem that the American School Food Service Association might well join with the curriculum people in preparing a bulletin which would point out the importance of the school lunch problem, some educational principles involved, and some recommendations for introducing more teaching-learning procedures into the

curriculum. The Association for Supervision and Curriculum Development is the one organization that brings together all types of curriculum specialists and general administrators interested in instruction. Possibly it might join with the A.S.F.S.A. in a cooperative effort.

Second, there are three things that might be done at the state level. In most cases school lunch divisions have not yet worked out close working relationships with the instructional people within the various state departments of education. There are many ways to do this, and it seems essential that it be done.

A second need is for the development of a policy statement for each state. The very development of this policy could be a way of bringing together different types of specialists within state department staffs.

Another state matter of great importance is the rôle of the teacher educating institution and the graduate school in preparing people to deal with the school lunch problem. Considerable attention has been given to this already in regard to inservice education of school lunch personnel and the preparation of specialists other than educational specialists. But certainly teacher educating institutions can recognize the school lunch problem and introduce it in both their preparatory programs for teachers and their preparatory programs for educational specialists and general administrators. Much exploratory work needs to be done in this field.

Third, the American School Food Service Association might well make a study of the multi-dimensional approach to the school lunch program which would include curriculum. Multi-dimensional might refer to aspects of the problem like feelings, taste and nutrition, or it might put the dimensions on a broader basis such as management, cooperative planning with instructional people, specific teachings dealing with facts and principles such as those one would deal with in science and homemaking education, and social education, a term that could be used to embrace attitudes, manners, cooperative skills and personal responsibilities. Such an agreement among the persons directly concerned with management of the school lunch activity might tend better to orient newcomers to this work.

Fourth, some planning should be done and some recommendations should

be prepared on ways and means of interesting the busy teacher in the educational problem of the school lunch. Many elementary teachers whose children go home for lunch tend to ignore the problem. Teachers of home and family living, having had in many cases an unfortunate experience with school lunch, sometimes tend to shun their practical responsibilities as consultants and to ignore the teaching opportunities presented by the school lunch. Even teachers of health seldom use the lunchroom as a learning laboratory.

Fifth, a definite attempt should be made through experimental attempts in certain schools and school systems to work out appropriate personnel records and parent interviews so that parent, teacher, administrator, specialist, instructional specialist, and health specialist might all contribute to the accumulation of a longitudinal record and the wise use of that record in counseling.

Sixth, there should be some organized study of implications for school plant planning. Thousands of new buildings are being built. Instructional implications and sometimes more practical implications are often ignored in the planning of these buildings. For one thing, no one has found out how to avoid the mass feeding operation in a huge school. These large schools create problems of their own and particularly in regard to the school lunch program.

Small neighborhood schools are now being built in some school districts. More of these should come into existence. A few school systems are decentralizing their high school plants on one campus into units as small as 250. Such decentralization will make possible some favorable situations for the school lunch activity.

COOPERATION NEEDED

The foregoing represent only a few of the recommendations that might be made in this field. All the state directors and specialists concerned can think of others.

All work in this field should be controlled by the principle that conditions conducive to growth and mental health can be brought about only when the school lunch is made a pleasant, friendly, healthful activity carried on in the milieu of a small school or group by cooperating groups of parents, children, professionals and service people. #

Exploratory studies provide
some hunches on

Teacher Morale and Quality of Education

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THE simple fact is that not much is known about teachers and about teaching in areas that are really significant for improving education.

Much of the educational personnel research that exists is fragmentary and of a static character. One finds reports of investigations that give an answer only if you agree not to look behind the curtains that delimit them. Administrators know what are reported to be the personal characteristics of a good teacher, provided one assumes that all positions demand these characteristics. Many of the questions that need answering are behind the curtains of "if these things are so." Frequently the curtain may be "time." Research produces lists of qualities desirable in teachers, but there are no answers as to whether such qualities are born in teachers or can be developed in teachers and whether they can even be destroyed by some widely followed personnel policies and practices.

A few studies are beginning to appear that touch on some important issues. L. W. Anderson¹ made a study of teacher morale which related high morale of teachers with higher educational achievement of students. His study led him to list many factors that may affect morale. But Mr. Anderson left many questions unanswered and the further studies that should have been suggested by his research have yet to appear.

¹Anderson, Lester W.: *A Study of Teacher Morale*, State University of Iowa, 1950.

In the June 1955 issue of the *Journal of Experimental Education*, E. C. Hunter summarized several studies of morale and described one which he conducted in the New Orleans public schools. Many of the studies he described are investigations of only one or more parts of the morale factor configuration. Many studies start from definitions or lists of factors affecting morale; few begin with observations, recorded anecdotes, or unstructured interviews. None is comprehensive in scope.

A "know yourself" type of research seems to be emerging. This has possibilities of contributing much to understanding the factors that affect teachers and teaching. Arthur T. Jersild has made a challenging study in "When Teachers Face Themselves."² From his study of approximately two hundred teachers, he states that two concerns stand out for teachers—the problem of the meaning of life and the problem of anxiety. Mr. Jersild has not answered the question of whether the concerns of teachers are different in quality or quantity from those of the nonteacher or how these concerns affect the teaching of teachers. His research does not attempt to point out the significance of his findings for improving education. Such depth studies into the teaching faculty are promising as well as challenging. If

²Jersild, Arthur T.: *When Teachers Face Themselves*, Bureau of Publications, Teachers College, Columbia University.

they stimulate further research they will have served a good purpose because at the present time we know far too little about teachers. Considering the fact that the largest single item on the school budget is for personnel services, we must give attention to the state of ignorance about what affects teachers.

From many standpoints—from that of the community furnishing the money, of the board member and superintendent concerned with efficient administration, of the boys and girls in the classroom whose education may be affected, of the teachers, supervisors, principals and superintendents concerned with their own welfare—the core questions for which better answers are needed may be stated as follows:

What is it that affects the teaching rate of teachers?

What is it that teachers need to get from their professional employment if they are to give more from their potential storehouse of skills, abilities and knowledge to improve the education of young people? That the giving rate differs for different teachers seems obvious to those who think about themselves and their colleagues.

When did you get the most satisfaction from teaching? Has this been less in some instances and, if so, why?

When you had high satisfaction did you give more freely of your ability and skill?

When you got less satisfaction did you withhold some of your potential contributions?

Do you recognize colleagues who have gone "dead" on teaching, repeating themselves, routinizing what should be creative and vital? Why?

Are there not some who have slowed down? Are there not some who, to their last day of teaching, remained vital, growing, contributing educators? Why?

These are the not-so-easy questions to answer, but these are the important questions for educational administration to answer.

A group of experienced administrators and teachers has been challenged by these questions in this unexplored area of research. For more than a year, members of this group have been meeting and talking. They have been making simple exploratory studies. Most of all they have been listening. They have discovered that one can find out a great deal about teaching by listening carefully and

thoughtfully. One possible reason we may know so little about teachers is that educators are not in the habit of listening. The educational profession is a talking profession and "out-talking" is almost a professional virtue. Listening is not highly developed as an art even by those administrative staff members who should be listening to teachers.

This group of searchers has been concerned about the teaching rate of teachers, which is often labeled as "morale" for convenience more than for definitive purposes. What are some of the slowly forming assumptions that stimulate these studies? While there is no semantic agreement among all members of the group, in their conversations they begin to show agreement about some of the following statements or assumptions that form a basis for their research.

1. A teacher must get a high degree of satisfaction from his professional employment if he is to contribute voluntarily and freely of his potential resources to his profession.

2. Satisfaction and morale exist in parallels—high satisfaction in teaching is generally accompanied by high morale among teachers, individually and in groups.

3. Morale is not a narrow, one-way street. It is composed of many interdependent, interacting and changing factors affecting either a group or an individual teacher. While morale may not be subject to easy measurement, indications of its presence and absence can be observed and recorded.

4. Morale is present to the degree that an individual directs his abilities, skills and knowledge toward the achievement of a desired and known goal about which he has convictions, personal acceptance, and faith. The degree to which morale is present is indicative of the degree to which potential individual and group resources are focused and called into action. Morale is, therefore, a general measure of the voluntary efforts of the individual and the group that lead to greater productivity toward desired goals.

5. The objective of all school personnel administration is to develop those policies and practices that maintain or raise the morale of individuals and groups. To lower morale

inadvertently is to decrease productivity. To raise morale is to increase individual and group productivity.

6. The objective of school personnel administration is to evaluate present policies and develop those policies and practices that maintain or increase the morale of educational employees. Morale and teacher welfare are inseparable.

If these assumptions are accepted, then educational personnel administration has a theoretical basis on which practices can be evaluated and developed. In view of the fact that, at present, the basis for policies in this area is hazy, perhaps these assumptions deserve a second reading and some consideration. Teaching is gradually emerging as a profession, but the policies and practices widely followed came into existence at a time when a teacher was not considered "a professional worker." Some reflect the time when the judgment of teachers was not trusted. Some are definite hindrances to the development of professional attitudes among teachers. Some are definitely morale destructive. Many "old wives' tales" behind the reasons for personnel policies and practices need to be re-evaluated according to some sound personnel theory.

In the explorations and simple researches that have helped to formulate these assumptions, hunches are beginning to take shape. A hunch is the first hazy stage of question formulation—a necessary step in the careful statement of a hypothesis to be tested by research. Many of these hunches are provocative. Some are being incorporated into a larger design for testing in research in educational personnel by this group of students.

One hunch that is emerging is that schools, like societies, are structured in their relationships. The structure, its strength, and its rigidity differ with the school situation. The structure can play a powerful rôle in influencing the dynamic quality of the educational program. Some structures follow the line-staff organization so commonly diagrammed to describe how a school system works. But some of them do not.

The structure may differ, depending on what function is described, but certainly the personnel structures are more varied and in some cases more powerful than the line-staff organization. There may be unknown focuses of personal power and influence. Educa-

tional progress may be possible under some types of structuring, but in others the structure may be the block. Principals desiring to offer school leadership may beat their heads against stone walls of intangible resistances that cannot be overcome except by changing this basic personnel structure. Sometimes the personnel policy of a school system itself can rigidify a certain kind of obstructing relationship. What structuring is permissible in maintaining high morale and a dynamic education?

Faculty relations may be related to the "position" concept of individual faculty members and faculty groups. They operate toward positions thought of as higher, lower and on the same level. How do teachers conceive of the position of principal? This may determine what the principal can do and what he should not do. What are the "social distances" existing between positions, and how does this factor determine acceptable behavior? Why is the supervisor grouped with the administration, and what problems in improving education does such a designation create? What do secondary teachers think of elementary teachers, and how does this affect attitudes toward the single salary schedule? Position concepts may influence or effectively impede educational communications.

The "boss" concept linked to the administrator is still with us even though it is weaker. In place of the "boss" concept there may be other concepts developing with respect to certain positions. What are they?

Salaries, while they are important, may not be so critical as they are publicized to be. The dissatisfactions of the secondary school teachers of New York City may have more to do with loss of status and recognition than they do with salary differential. The size of the pay envelope may be the visual means for expressing many things in personnel relations that can't be expressed in as concrete terms and that are frequently not talked about. What is the relation of the policies of salary schedules to morale? What happens to morale when you reach the top of the salary schedule in 15 steps and spend the next 30 years with no salary recognition for improved teaching? If teachers' salary demands were all met, would education in the classroom be better?

Morale may have a strong psycho-

logical base. What are the rewards teachers seek? That they differ among teachers may be true. Do they differ with older teachers? One hunch that keeps reappearing in tentative researches is that educational administration has not provided for sufficient and varied psychological rewards and has given too little attention to rewards for the older teachers who now dominate the school. Democratic administration that gives a few psychological rewards may not produce a high state of morale among the faculty. May it not produce a contentment, a satisfaction with a status quo? We have not studied or developed systems for psychological rewards in education. We are frequently unable to distinguish between high morale and just plain self-satisfaction. Productivity among educators may require a certain degree of dissatisfaction. A perfect morale score may be synonymous with somnambulism.

"Aging of teachers" is a short-circuit answer of administrators that is given to explain why something is less than desirable in schools. It is an offhand answer because we don't know very much about younger or even about older teachers. What is the kind of attention "older" teachers seek, and do younger teachers want a different kind? "Aging," an expression often used for slowing down, may be a reaction induced by controllable causes. We just don't know why some teachers "age" early in their careers while others never seem to grow old.

Sex, marital status, religion and race, in and of themselves, seem to have little to do with morale, although these very factors when they form the basis for relations within a faculty may be destructive of morale. Are they?

Meaningfulness of life, significance of work, freedom to decide even to make mistakes have been found to be important factors determining morale status in industry. Are they equally effective in educational institutions? What is their status in a school system, and do they differ among schools, among groups of teachers, among individual teachers?

Routine work, irksome duties, self-esteem, personal problems—such factors may affect morale. Almost all teachers seem to have problems, but not all schools provide, consciously, an opportunity to obtain the advice and help needed by teachers in facing their

personal problems. Industry has found such assistance to be beneficial to worker morale and, in turn, to increased productivity. What about the human beings who are in education?

The community, the school, the parent-teacher relationships—ideas that are talked about so often—may be administered on the basis of reminiscences of days gone by. Whether we like it or not, the school, the community, and the professional teacher are evolving different patterns and different qualities of relationships. Teachers are not so much "of the community" as formerly. May it not be true that many school policies and many parent-teacher activities are still organized in a framework of relationships that exist no longer? The teachers', parents' and community's thinking about one another may be changing without anyone's being aware of it. What is it now?

Sometimes the staff of a school system or the faculty of a particular school evolves "ways of doing things" that are never talked about but are influential in controlling behavior. A "code of doing things" may exist on the junior administrative level that differs from the teachers' code. These standards or codes may operate without relation or even in opposition to personnel policies. They may be stronger than the principles of a salary schedule, the rules and regulations of the board of education, or the administrative edicts, rules or suggestions of the superintendent. They may be the determinants of what will, and can, take place in some schools. Many teachers relate how the group can circumvent "the boss" while he thinks it is co-operating even if not too effectively. What are the unwritten group standards of a school and schools? Can they be changed, and how?

Other hunches are taking shape out of these exploratory studies of personnel. A few have been mentioned for the purpose of illustrating possible directions in which personnel research could go. The educational administrator will be working in virgin territory when he asks this basic question: What is it that makes a teacher use more of his personal resources to improve his teaching? He will be rewarded by the significance of his findings because the morale of a school may be the most significant factor in determining the quality of education. #



It started at Lane Technical High School, Chicago, twenty years ago, and Lane's original system of teaching driving to students is still in use there. All behind-the-wheel training also is effective, as is use of a driving range. Variations on all three methods are practiced in various American cities.

The Lives You Save by Driver Training

are well worth the dollar cost per student

Interviews with **WAYNE P. HUGHES**, Director of the School and College Division, National Safety Council and **ROYAL S. BROWNE**, Driver Training Instructor, Lane Technical High School, Chicago

By **DOLORES E. HENNING**

AS MORE and more states are providing financial aid for driver education courses, more and more administrators are faced with the problem of fitting driver education into their curriculums.

Sold though he may be on the value of driver education, the administrator still has to find the money, the teacher, and the time, during an already crowded school day, for the course.

Within the next 10 years, thinks Wayne P. Hughes, director of the school and college division, National Safety Council, most states will pass legislation authorizing payment by the states of part of the cost of driver education courses.

Just how expensive are such courses? One estimate is that "the dollar cost per student for a complete course in driver education varies from \$20 to \$35, depending upon local conditions and type of programs. While this cost may appear high, it may be pointed out that it is no more expensive than for other special subjects in the curriculum."¹ The cost includes the teacher's salary, instructional material, and insurance and maintenance of

automobiles. Some schools purchase the automobiles used in their driver education courses; in other towns automobile dealers lend cars to the schools.

There are three types of driver training programs. At present, according to Dr. Hughes, not enough research has been done to establish conclusively that any one of the three is the best way of teaching driver education. More research is needed, and probably will be undertaken, he thinks.

One fact has been established: The most expensive method is the conventional, all behind-the-wheel training with dual control cars. One student is behind the wheel, with the instructor beside him; usually three other students are in the car, observing. A recent study² covering 75,607 students in 1115 high schools showed that in 1954-55 the average cost for each student trained this way was \$33.32. This included 32.8 clock hours of classroom instruction, 18.9 hours of observation in a car, and eight hours of behind-the-wheel practice.

A second method depends upon an off-the-street driving range, constructed

to simulate street driving conditions. In a dual-control car, the instructor shows students the primary steps taken in starting and stopping an automobile. As soon as a student has demonstrated to the instructor's satisfaction that he can perform these tasks, he is permitted to drive alone. The instructor tours the area in a car equipped with a public address system, giving advice when it is needed.

After the pupils have mastered the first skills, they again are taken in a dual-control car to learn the next steps. Occasionally the instructor rides in a car with a student to prevent him from forming incorrect habits.

During 10 years that such a plan was in operation in Detroit,³ there were no personal injury accidents, and property damage was, on the average, no greater than for dual-control cars operating on the street at other schools. Detroit figured that the cost per student of this instruction was only \$10.

A third method features the use of dummy cars. This method is well illustrated by the course organized at Lane Technical High School, Chicago, in

¹Driver Education in the Secondary School: What—Why—How, Association of Casualty and Surety Companies, 1954.

²Allgaier, Earl, and Yaksich, Sam: What You Pay and What You Get, Safety Education, April 1956.

³Graham, Gordon C.: Detroit Teaches Pupils Behind-the-Wheel for \$10, Safety Education, April 1953.

1937, and still being taught there. As this was the original example of mass teaching, let us look at this course in some detail.

1. For one semester 30 boys spend one double period (an hour and 25 minutes) a week in the safe driving classroom. Ordinary desks occupy half the classroom; in the other half are "practice cars" made in Lane's shops from the plans of Teacher Royal S. Browne.

2. During a second semester 15 boys spend a double period each week for 10 weeks on a practice driving course laid out on the school's campus.

An attempt is made to have every Lane student take the safe driving course, but with an enrollment of nearly 6000 boys this is impossible. However, a majority are taken out of a shop class once a week during their sophomore year for driver education.

Although textbooks are now available, none are used at Lane. The course of study, modified over the years as laws, traffic conditions, and cars have changed, is pretty much that adopted

19 years ago. Basis of the class work is two small booklets, "Laws Relating to Motor Vehicles," published by the state of Illinois, and Chicago's "Traffic Regulations."

While Mr. Browne impresses his students with the necessity for traffic laws and for obeying such laws, he also points out their rights as motorists. For instance, one boy reported a policeman had given him a ticket for parking without lights. He and Mr. Browne checked the Chicago traffic regulations and found that, in a brightly lighted area such as he had been in, the law did not require that a parked car's lights be turned on. The boy went to court, entered a plea of "Not Guilty," and handed the judge a marked copy of the traffic regulations. The case was dismissed.

Posters, cartoons, newspaper and magazine articles—anything pertaining to safe driving—cover the room's corkboards.

Mr. Browne has found that state and city departments, insurance companies, automobile manufacturers, safety or-

ganizations—in fact, just about anyone concerned in any way with driving—are most helpful in giving him information and material he needs.

The "practice cars" in the classroom consist of a single wooden seat (adjustable for leg length), a steering column and wheel, steering column gearshift, clutch, brake and accelerator. While these look and work pretty much like similar equipment in an automobile, they are really electric switches which light corresponding lights on a central panel.

NO GEARS STRIPPED

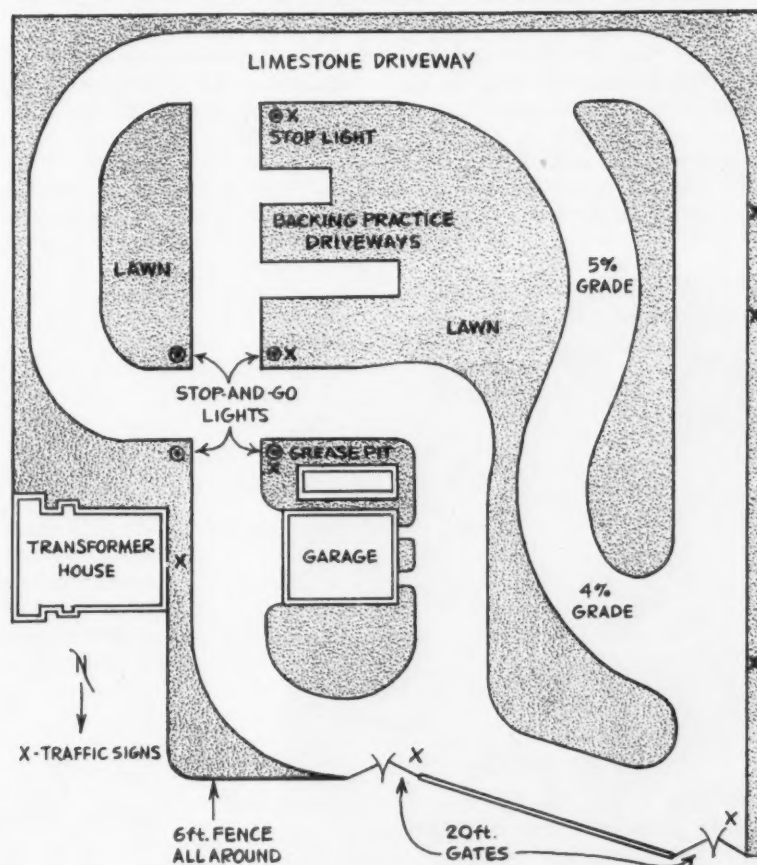
Watching this panel, the instructor knows instantly that the boy in car 18 has stepped on the accelerator when he should have stepped on the brake. If a boy shifts gears without throwing out the clutch, he simply fails to light the proper lights on the control board. In a real car he strips the gears.

Conventionally enough, the boys are given an unconventional test at the end of the semester. Mr. Browne explained: "We have made motion pictures by mounting a camera on the windshield of a car which is driven through all types of traffic. The film is projected on a screen before the students in the practice cars, which are driven according to the conditions depicted. The drivers' reactions are registered on the light panel."

The students also are given psychophysical tests—eye, range of vision, glare blind, distance judgment. In a special machine, also made in Lane's shops, reaction time is tested. Just how long does it take for a message to travel from the eye to the brain to the right foot—which then moves from the accelerator to the brake? The average time for Lane Tech students is a fast $\frac{3}{8}$ second; nationally the average is $\frac{5}{8}$ second. The whole point of this test, of course, is to make the boys realize that, contrary to what they probably have been thinking, they don't react instantly to any situation that means "Stop the car!" A prominently displayed poster shows the time needed to bring a car traveling at various speeds to a complete stop.

The practice cars are almost boy-proof. With little maintenance, they're in nearly as good shape as when they were installed in 1940. While these cars are not manufactured commercially, teachers from other cities have gone to Lane to examine and measure the cars with the idea of reproducing

Lane Technical High School's outside driving course is about $\frac{1}{2}$ mile long, with curves, traffic signs, automatic stop and go lights, and backing areas. There's only one thing wrong with it: It should be longer.



them in their own school shops. Also there now are dummy cars commercially manufactured.

Mr. Browne is often asked, "What about cars with automatic transmissions?" Under present Illinois laws anyone passing a driving test in a car with a conventional gearshift is given a license entitling him to drive a car with a gearshift or one with an automatic transmission. But anyone passing the test in a car with an automatic transmission is given a license restricting him to driving that kind of car. For that reason, until the law is changed and/or most cars are equipped with automatic transmissions, Mr. Browne expects Lane Tech boys will be taught to shift gears.

However, two of the cars used for actual driving instruction are equipped with automatic transmissions. Rarely, because Lane Tech boys tend to be mechanically minded, a boy just can't operate a car with a gearshift but does fine with an automatic transmission.

DRIVING COURSE BUILT

The outside driving course is a fenced area on the campus. The bituminous surfaced roadway is about $\frac{1}{8}$ mile long and has curves, turns, a 5 per cent grade (the nearest thing to a hill in Chicago), standard traffic signs, automatic stop and go lights, and backing areas. This area was built by the W.P.A. when the driving course was begun. Mr. Browne would like to make only one change: Enlarge it. When 15 cars are driven on the course, traffic is just too congested. For this

reason, until their final lesson the students are never permitted to drive in second or third gear, only in first or reverse.

This driving course has many advantages: Even though they have already learned the fundamentals of driving, beginning drivers are considerably safer there than they would be on the city streets. Occasionally a damaged clutch or a banged-up fender has to be repaired, but there never has been a serious accident on the driving course. Then, too, there are financial advantages. Cars owned by the school and driven only on school property do not need to have state licenses or to be covered by insurance. Gasoline taxes—about 5 cents per gallon in Illinois—are refunded, since the taxes must be paid only by owners of vehicles used on public highways.

"The cars are driven about 25 miles by each student," explains Mr. Browne, "but because of their practice on dummy cars and the highly concentrated experiences on the driving course, the students attain the proficiency usually gained from several hundred miles of driving, and the state examiners have highly praised the students presenting themselves for an operator's license."

The school owns 18 cars. Three of these are held in reserve and used when repairs must be made on the regular cars. Automobiles are replaced about every five years.

Lane offers no driver education for adults, except indirectly. The boys take home what they have learned, and

they bring back to Mr. Browne questions from their parents. Parents are enthusiastic about their sons' taking this course; in 19 years only one parent has refused permission for his son to learn to drive in school. If it is practical, the Lane teacher thinks it is an excellent idea for schools to offer driver education courses for adults.

As far as getting a license is concerned, Lane boys are on their own. The school makes no arrangements for their driving tests. This is partly because school authorities think that the responsibility for granting a license should rest entirely with the examiner and not in any way with the school. Comparatively few boys who have taken the Lane course are involved in accidents or are arrested for traffic law violations. Despite the success of the Lane course, driver education is not taught in other Chicago schools.

FINDING A TEACHER

Finding a teacher of driving with proper training or one willing to take proper training is not quite the problem it once was.

Back in the 'Thirties and 'Forties most teachers received their training in short-term intensive courses—usually a week long. Instructors were mostly teams sent out by the American Automobile Association and the Association of Casualty and Insurance Companies. They often conducted their classes on college campuses and under college auspices. As the colleges themselves began instituting courses for driver education teachers, the demand



In these dummy cars, Lane's students can learn a great deal about steering and shifting gears before they ever sit in the driver's seat of an automobile.



for the short courses lessened and now has almost disappeared.

When a school system decides to begin courses in driver education, often there are teachers in the high schools who are interested and willing to take the necessary college courses to qualify as driver education instructors. This is not the answer to the principal's problem of what to do with the teacher who has not been successful in teaching other subjects. The teacher of driver education needs to be a likeable person and to have patience, imagination, energy, an interest in young people, knowledge of the subject, and a strong desire to do an effective teaching job.

Patience is more important for the driver instructor than for other teachers because he spends his days catching students' errors; students change, but errors are often the same. If the teacher becomes annoyed and scolds the youngsters, he may make them so nervous or resentful as to interfere with their ability to learn to drive.

Perhaps the school administrator doesn't think of it that way, but the driver education course is part of a school system's public relations pro-

Part of one wall in Lane's driver training classroom is covered with traffic signs. Students learn that standard shapes have been adopted for the various signs; a driver can recognize the shape before he can read the sign.

gram, Dr. Hughes of the National Safety Council says. Of course, the school head wants all subjects well taught, but he must realize that it is obvious to local citizens how well or how poorly driver education is taught. They are likely to decide other subjects are taught equally well or equally poorly.

NO EASY ANSWER

There isn't any easy answer to the problem of scheduling driver education classes, Dr. Hughes admits. If the administrator and his community think it is important enough, time and money will be found. It has been found in thousands of high schools.

Driver education may be established as a regular subject in the school curriculum, or several periods a week may be designated for it within another subject.

Some schools, for financial reasons, offer only the classroom phase of driver education. Undoubtedly this is the more important, for teen-agers will

learn to drive somehow; a relative or a friend will teach them if no one else does. But they won't learn much about the theoretical end—such as traffic laws and courtesies, and why a driver should follow certain procedures—unless they learn it in school.

If teen-agers are taught to drive by persons who themselves never had adequate training as drivers, they pick up bad habits. One of the chief arguments for driver education courses is the necessity for avoiding this perpetuation of bad driving habits.

Dr. Hughes thinks it is a mistake for schools to schedule the practice driving periods after school, on Saturday, or during the summer, even when they are supervised by qualified instructors. If the school doesn't attach sufficient importance to driver education to schedule it during the regular school day, he points out, students are likely to think it of small importance. Also the wholesome relationship between classroom work and practice is broken. #

SCENE: Superintendent's office, City Hall.



STAGE SETTING and PROPERTIES: Bust of Horace Mann. Picture of former, much loved superintendent. Graph showing accomplishments in spelling of various grades. Tarnished silver cup, dated 1900, and inscribed "Presented to the School System in the State That Collected the Most Money for 'Oyster Shuckers' Memorial' by the Evening Battle Cry." Picture of "Reading From Homer." Bookcases filled with works on psychology, history of education, school administration, supervised study, and curriculum making. Bound reports of N.E.A. for last 25 years. Five-foot shelf of school surveys. Iron safe on top of which is a venerable atlas and a city directory. Calendar from St. Germacide National Bank.

THE SUPERINTENDENT'S DAY

Hasn't Changed Much—or Enough

This skit, written by ERNEST C. HARTWELL

20 years ago when the author was superintendent
of schools at Buffalo, N.Y., has just come to light.

DRAMATIS PERSONAE

SUPT. (vigorous looking man in squeaky swivel chair)

STENOG. (long-suffering, capable, has sense of humor)

SCENE I

SUPT. (*pressing buzzer venomously*): Miss Long-Suffering, here are your general instructions for the day.

1. Send form letter to 17 applicants for teaching positions in our school system.

2. Rubber-stamp my name on all these Normal School entrance blanks. I thus personally guarantee the scholarship, moral character, personality and general fitness of a lot of young people I don't even know by sight, in accordance with the wise provisions of the state law.

3. Reply to these inquiries on our salary schedule, sick leave regulations, and auto allowance.

4. Get up some statistics for the Playground Association. It wants to know how many square feet per child per school are provided under existing conditions. Compare these with the figures of 10 years ago.

5. Take care of these five questionnaires from graduate students. They're working on their theses.

6. Write the State Department apologizing for the delay in getting out our reports.

7. Make a list of the 35 oldest teachers in the system for the secretary of the State Teachers Association.

8. Get me the percentages of high school freshmen who failed in algebra last semester.

9. Write a letter of regret to the attendance officers. I find I can't attend their wiener roast.

10. Politely decline this request to review the book "Pedagogical Engineering."

And, Miss Long-Suffering, hurry all this up, if you please, for I have a lot of other letters to get out today. Then I want to dictate a shattering defense for that legislative inquiry on school costs. But, before you start, bring in my schedule for this week.

STENOG. (*dashes out to her adjoining coop and dashes back in*): Here's your schedule, Dr. Supt.

MONDAY

Noon: Speak at luncheon of drive to eliminate "The Merchant of Venice" from the approved high school reading list.

4 p.m.: Principals' meeting.

8 p.m.: Speak to Men's Club, Sixth Baptist Church.

TUESDAY

Noon: Lunch with Committee on Prevention of Crime. (Committee is of opinion that, if schools were doing their job, no committee would be necessary.)

4 p.m.: Teachers' salary committee.

8 p.m.: Judge debate on "The Value of Latin."



WEDNESDAY

- 10-12: Board of Education meeting.
- Noon: Rotary Club luncheon.
- 3 p.m.: Mothers Club, Horatio Borts School.
- 7:30 p.m.: Speak to Ladies Auxiliary, Iron Molders Union.

THURSDAY

- Noon: Lunch with Chamber of Commerce thrift committee.
- 4 p.m.: Conference with Chief of Police on safety instruction in schools.
- 7 p.m.: Annual dinner of Morning Glory Alumni; last of nine speakers.

FRIDAY

- 10 a.m.: Delegation seeking addition to schoolhouse built just after Battle of Gettysburg.
- 11 a.m.: App't with J. Babbitt, realtor, re land he wants to sell as school site.
- Noon: Lunch with Boy Scout executive committee.
- 1:30 p.m.: Dentist (even supt. is entitled to some relaxation).
- 3 p.m.: Meet with committee from Taxpayers League interested in retrenchment.

- 4 p.m.: App't with Corp. Counsel defending Mrs. Scoopus' damage suit for fall on icy sidewalk in front of Demosthenes Vocational School, which caused her great pain and anguish less than three years ago.
- 5 p.m.: App't with Inspector of Street Trades; alleges five boys selling newspapers failed to produce birth certificates.
- 8 p.m.: Lecture on "The Nature of the Child," Julius Caesar High School P.T.A.

SATURDAY

- 10 a.m.: Review school pageant celebrating 90th anniversary of opening of Garboyl Canal.
- Noon: Due to hear of Doll Dressing Drive for purpose of cultivating friendly relations with Japan.
- High school football game.

STENOG. (*glancing at schedule*): I don't seem to have you down for anything on Sunday this week.

SUPT. I have a note in my pocket about Sunday dates. Those calls came in late at night on my home phone. (*Lays schedule down and picks up bunch of newspaper clippings. Selects "Letters to Editor" clips first. Reads them sotto voce.*)

"I saw one of the school staff using a public school car on Sunday."—*Taxpayer.*

"The public would like to know why discrimination is practiced in the assignment of school janitors."—*Fair Play*.

"... I for one long for the day that will bring back the Little Red Schoolhouse."—*Amanda Stokes*.

"Why, I ask, should a public servant, the superintendent of city schools, be inaccessible? On two different occasions parties calling at his office were unable to see him."—*Irate Citizen*.

"You teach French in the high school. You also teach German. Yet our town has many Swedish people, and you do not teach Swedish. Who pays the taxes—the French? The Germans? The Germans are only handfuls. But Swedish people, they are plentiful."—*J. Jensen*.

SCENE II

TIME: Morning of the next day.

PLACE: Superintendent's office.

STENOG. Good morning, Dr. Supt.

SUPT. 'Morning. I don't like all this newspaper criticism about my being inaccessible. Instead of working on curriculum revision as I planned to this morning, I think I'd better receive all comers.

(*Callers are received in order of arrival.*)

SUPT. No, Mr. Myers, I do not wish to purchase any custom-made shirts. . . . Thank you, sir, but I'm not interested in acquiring stock in the Ureka Can Opener Company. . . . Harry, you ought to know that I'm already loaded with more insurance than I can pay for. . . . I have already contributed to the fund for suffering Siberians, Mrs. Allerdyce. . . . Yes, I'll take two tickets to the Policeman's Ball, Officer. But I'm not just sure Mrs. Supt. and I can attend. . . . Bob, tell your city editor that our school system will not be influenced by the decision of the school principals of Wapoose, Wis., to require all teachers to wear purple smocks in the classroom. . . . Yes, Mr. Carter. I'll report to you at the board meeting tomorrow why Mrs. O'Rafferty, a cleaning woman, was laid off last Friday at Martin Luther High School. I'll investigate, Mr. Carter; you can rest assured. . . . We don't permit sales campaigns among the children at school—no, not even of garden seeds. . . . Sorry, Mrs. Appleby, I'll not be able to judge the Better Babies contest. . . . Mrs. Rosenblatt, I repeat, I'll do my very best to track down Abie's new rubbers. . . . Yes, Mr. Herman, you have rendered the schools a number of courtesies, and they are appreciated. But we really can't close school half an hour early Friday because Tom Mix is going to parade down Main Street. . . . So you want the high school cafeteria business in cracker jack? Now— . . . Gentlemen, I will take up with the board tomorrow your union's request for higher pay for coal passers. (*Rings buzzer. Miss Long-Suffering enters.*)

STENOG. There are three salesmen still waiting, Doctor. They handle mucilage, rat extermination, and ash cans.

SUPT. I won't be able to see them this morning. I'm past due at the Crime Prevention luncheon.

(*While talking with those who called in person, Dr. Supt. has been interrupted by 10 telephone calls in which he:*)

1. Promises bank to take care of overdraft immediately.
2. Tells a principal no holiday is contemplated on account of dedicating the new County Courthouse.
3. Informs four people he is not in need of substitutes.

4. Tells Mrs. Gollowitz he finds it difficult to believe that the teacher has "picked" on her little boy. Agrees to investigate why boy was kept after school for 10 minutes twice in one week.

5. Expresses surprise at Mrs. Hardcastle's complaint about Jones school principal. Tells Mrs. H. he has rarely known a lovelier character than Principal McSwitch. Is sure there must be some error. Agrees to investigate.

6. Promises to introduce Professor Squelch at Ladies Literary School next Wednesday. Squelch to speak on "What's Wrong With Our Schools?"

7. Hears that vandals broke into schoolhouse last night.

8. Informs credit man from Golden Rule Installment Furniture House he has no way of compelling school employe to meet installments.

9. Tells two persons that board rules now prohibit essay contests, however patriotic or philanthropic the intent.

10. Makes four engagements, five promises, and two wrong decisions.

SCENE III

(*Clock is striking five.*)

SUPT. (*desperate, telephones wife*): I may be a couple of hours late for dinner, dear. I must work on my message to the Association of School Superintendents at Chickabiddie Lake next week on "The First Duty of a Superintendent." You remember I spent all my spare time last summer blasting away through a book on the subject by Professor Quackenweasel of Abraham Lincoln Teachers College. I've been meaning to read another book or two on the subject but I just can't seem to get around to it. So a lot of my speech is going to have to be original material. Keep the meat loaf warm for me, and I'll be home by 7. (*Buzzes violently for Stenog., looks owlishly out window, speaks*): Miss Long-Suffering, I wish you would look up a quotation that begins: "To have is not to hold under the seared firmaments." I don't remember who wrote it but you know how it goes. It would be a great beginning for my Chickabiddie speech.

(*Fixes eyes on Horace Mann's bust and declaims aloud*):

It is imperative that we, the superintendents of schools, to whom have been entrusted the sacred duty of providing that indispensable educational leadership without which no real progress can be made in the operation of our great institutions of learning, must properly evaluate the individual responsibilities, the composite of which contributes to make up the sum total of our great task, and never for an instant permit the distracting details of the daily routine to obscure our vision, or—(*lapses into his regular speaking voice*) I'll write that down in longhand and let Miss Long-Suffering break up the sentence tomorrow. It may be a wee bit long. But that's a Supt.'s first duty, all right—not to let distracting details obscure his vision. Yes, I think I'm on the right track for the Chickabiddie boys.

(*Blows nose, locks desk, and, looking wise and satisfied with a day well spent, starts out the door, muttering*):

Before I go to judge the high school debate on "The Value of Latin," Mary and I must solve a difficult problem in arithmetic. It looks as if we would have to defer buying the new baby carriage at least one more month. I'll call the bank about that overdraft the first thing in the morning.

#

Nurse and teacher discuss the hearing problem of a school child.

**Teamwork approach characterizes
fifty years of health services
in Denver's public school system**



School Nurse Is Part of School Program

GERTRUDE E. CROMWELL

Supervisor of Nursing, Denver Public Schools

IN 1906, the first school nurse was employed by the Denver Board of Education. Fifty years have gone by, and we are celebrating our golden anniversary. Today's nurse is a far cry from the one 50 years ago. Not that as a person she is different, for both then and now the women who serve the children in the capacity of "school nurse" are dedicated women.

The first nurse stayed just one year, resigning because of discouragement and overwork. She was employed to work in the "foreign district," where heads and skin needed "cleaning up." Her places of activity were shelves in the lavatories in seven schools, miles from transportation. But what this nurse saw was not just dirty heads and skins but crippled bodies, aching teeth, and underfed children. What she had to work with was almost nothing, either in the schools themselves or in the community.

Today, Denver has 54 school nurses employed to work some time every week in every school, with transportation allowed and community services available if not always adequate. Modern health rooms are provided in all buildings, and the new health rooms are a part of the administrative setup. Each nurse carries an average pupil load of from 1200 to 1600 in the elementary and junior high schools, and there are full-time nurses in the high schools in which present enroll-

ments are from 1100 to 2900 students. With rising taxes and the tax-conscious citizens eyeing all parts of the school structure, we have had to look at the school health services to see if we nurses are luxuries. We believe we are not.

We like to believe that the program is based on this premise: "If what is done in a school health program contributes to the educational process, it belongs to the school program. If it does not, it belongs to some other community agency." The school nurse then becomes a member of two professions—nursing and education, with a bit of social work interwoven into her educational background.

NURSES' SERVICES

These services are provided by a Denver school nurse today, as stated in the job analysis:

1. Assists teachers in their classroom program by:

A. Helping to relieve their concern for individual children.

B. Planning with the teachers the classroom teaching units concerned with health service activities that involve the children.

C. Planning with the teachers time for vision and hearing tests, weighing, dental examinations, inspections for skin infections, medical examinations.

D. Planning with the teachers all classroom first-aid procedures for the

care of minor injuries. Planning the major first-aid program for the building, ordering the supplies, and supervising the materials used by the classroom teachers.

2. Assists the principals and teachers in admitting and excluding children who are ill or injured. All obviously well children are admitted by the office staff or teachers but, when there is a doubt, the nurse is consulted if she is in the building. All exclusions for illness are recommended by the nurse when she is in the building; counseling parents on further care is also her province.

3. Organizes all programs for the control of communicable diseases in her building, such as immunization procedures, reporting of diseases, and helping with parent education in planning for better understanding of the parents' part in disease control.

4. Assists the medical examiners in conducting the examinations when given at school. Encourages referral to the family physician for these examinations. Follows through with parents and teachers on all medical recommendations for helping the child.

5. Is responsible for obtaining all screening procedures on the children who are due to have them. These include weight, vision, hearing and dental screenings. The nurse does only a few of these screenings but is responsible for selecting and scheduling

the children who are screened by the technicians when they come to the school.

6. Is responsible for family contacts concerning health problems of individual children. The nurse does this by conferences with parents at school, in their homes, over the telephone, and by written notes. During the 1955-56 school year more than 35,000 parent contacts were made by the nurses.

7. Is responsible for the care and management of the health service rooms in her school. This includes the activities carried out in the clinic, the supplies and equipment, and the appearance of the rooms. Records and reports are part of this division of her work. Each child enrolled in the school has a cumulative health record which follows him throughout his entire public school experience.

8. Is responsible for many miscellaneous activities that assist the children, parents or school personnel.

EACH SCHOOL IS DIFFERENT

I have outlined the basic framework of the program, but each school is different as is each nurse. At times there are special surveys, tests or programs to be carried out.

Many of the nurses participate with the teachers in classroom instruction programs during health classes or when sex education is presented. Many are in demand as speakers for study groups and parent-teacher meetings. Others make special studies and develop new

ways of functioning. No nurse may conduct regular classes unless she is certified as a teacher.

Another area where nurses function with teachers, psychologists and school social workers is in the mental hygiene program. Within the last 10 years there seems to be either a notable increase in the number, or a greater awareness, of emotionally disturbed children in our schools. Many of these are so disturbed that even children with considerable intelligence and ability are nonlearners, truants or delinquents.

TRY TO SOLVE CHILD'S PROBLEMS

The Denver schools have developed the team approach to help solve these problems. The teacher, principal, school social worker, and school nurse, working together, try to give these children special help. When the problems seem too great for the school team to handle, the principal may ask the school psychologist, after the child's parents have given permission, to administer a battery of tests to see if the underlying causes of the child's problem can be discovered. Then the school psychiatrist may recommend more intensive therapy or he may provide the social worker, teacher or nurse with some new guides for work with the parents or the child. By such conferences it is hoped all involved school personnel may gain better understanding of the children's needs and of ways of working with them.

In doing her work, the nurse has some rather fundamental problems which only the school administration, and especially the principals of the various schools, are in a position to help alleviate:

1. She needs to be clear about the lines of authority under which she works. The areas of authority within a democratic structure in a school include direct nursing and medical supervision as well as relationships to and assistance from the school principal and other school supervisors.

2. She needs an adequate work space or clinic and time to do a good job. This means a reasonable pupil load (fewer than 1500 pupils), equipment with which to work, and a cheerful, inspiring setting.

3. She needs a chance to be creative and to have a feeling that she has a job which is hers, a job in which by her own efforts she can succeed and be appreciated. This does not mean she wants to work without guides but rather to work creatively within a framework that she has helped to develop.

4. She wants security and status among the groups with which she works. Thus, she wants to be ranked in the schools with teachers, and, when she has comparable preparation, to be paid on the same salary schedule as teachers are rather than as other nurses working under other administrative jurisdictions are paid.

5. She needs an understanding of herself as a person because she is an individual and as such is unique. She cannot always park her home problems when she comes to work, and these problems affect her work, her attitudes, and her feelings toward the school and the teachers. Also, what happens at school is carried over to her outside life. Schools are child centered, and school people need many adult centered activities when they are away from work.

ONE CENT OF EACH DOLLAR

This Denver school nursing program as described here costs the taxpayers approximately one cent of each dollar of the school budget. The nurse's time is distributed on the ratio of one-half day per week for each 125 to 150 children, depending somewhat on economic conditions of the neighborhood, the ages of the children, the number of working mothers, and the amount of time that must be used for transportation.

#



Teacher and school nurse cooperate to give health education to child.



Idaho school appears to flow out of the hillside abutment. Colors add to the feeling of buoyancy.

SCHOOLHOUSE PLANNING

Monument to Reawakened Pride

ROBERT B. SHONFELD

Page 66

It's the Little Things That Count

ROBERT D. MORROW

Page 74

Monument to Reawakened Pride

Construction on ruggedly beautiful mountain site of glass-walled high school building, to house educational program integrated with needs of community, provides tangible symbol of renewed civic spirit among residents of ore mining town

ROBERT B. SHONFELD

CONSCIOUSLY or unconsciously, the school board building committee at Kellogg, Idaho, was looking for a monument when it planned its new consolidated high school building.

Located in the rich lead-silver-zinc Coeur d'Alene mining district in the beautiful Bitterroot Mountains, this town of 6500 should have had all the impetus and enthusiasm for growth it needed. But only a few years ago Kellogg seemed to be facing insoluble problems—problems stemming from the mining industry, which was its chief economic support, and from public apathy.

Much has happened to indicate a reversal of this attitude. Most of these events have taken place since the completion of the new high school building, following consolidation of nine small school districts of the area.

Completed and occupied in September, Kellogg High School solves the age-old, often unexpressed but important architectural problem of making a small secondary school building look *big*. It is an economical structure that works, educationally and psychologically. And, thanks to the skillful organization of its simple elements on a dramatic site, it is monumental, a symbol of an awakening interest in education in the community at large and especially in its dominant, once paternalistic, industry.

When they planned and designed Kellogg High School, Supt. Howard Andrews and his architects gave the mining community its first source of concrete achievement and a lasting source of pride. To accomplish this, Supt. Andrews actually put together an architectural team: Lawrence B.

Perkins of the architectural firm of Perkins & Will, Chicago and White Plains, N.Y., guided site selection, the relationship of educational program to building and financial planning, and the basic design and specifications of the building. A young Spokane firm, Culler & Gale (now Culler, Gale, Martell and Norrie), was given equal credit and the important job of turning out working drawings, detailed specifications, and on-the-job supervision.

SITE INFLUENCED DESIGN

Certainly, the monumental character of the building does not owe anything to size. It was designed for 600 students, and is about 68,000 square feet in area. The building's site has had a deep influence on its design. It is located in Jacob's Gulch, a narrow valley about a mile west of Kellogg. Mountains shelter the gulch (which runs north and south) on three sides. The south end opens on the highway and the town. A small stream, Jackass Creek, runs down from the mountains on the north end, right through the gulch.

The valley setting, the mountains, the ruggedly beautiful view, even Jackass Creek influenced the architectural features of the plan for the building. It is a three-element structure: classroom block, administration-service unit, and gymnasium. A steel and glass structure, the classroom wing is a two-story horizontal block on an east-west axis across the floor of the gulch. One end of the block spans the creek, and

(Text Continued on Page 68)

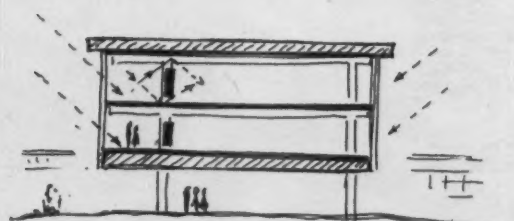
Three main elements are clear in the Kellogg design. Classroom wing rests on administration-service wing. Gymnasium-auditorium is at left of the administration wing. Mountains help filter out direct sunlight.



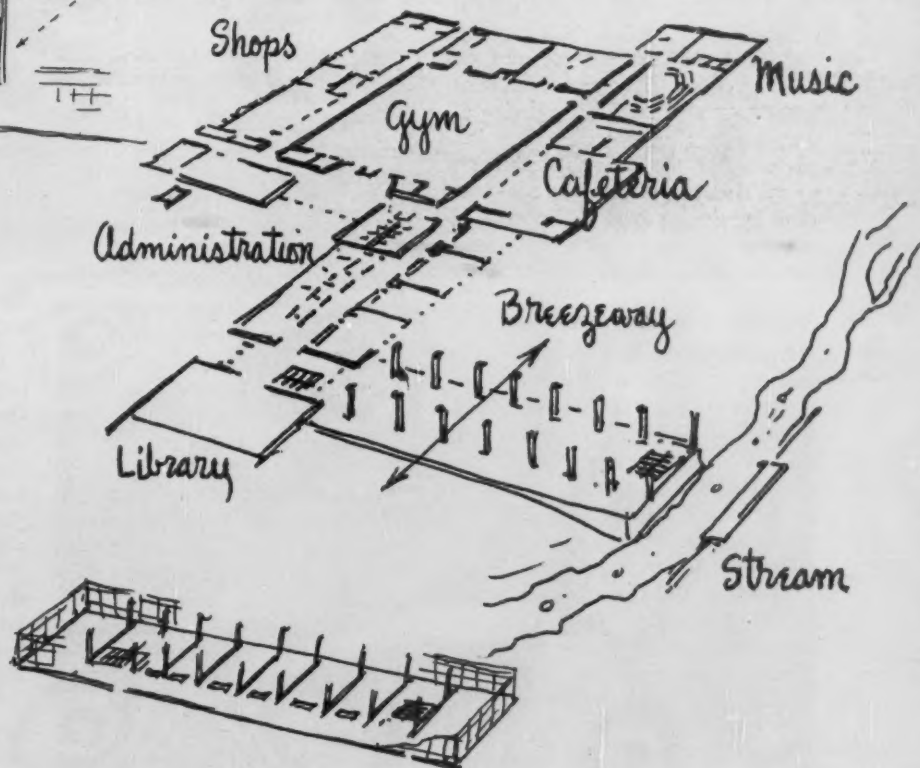


High school at Kellogg, Idaho, from southeast. Steel and glass classroom wing spans valley floor, crossing creek in foreground. Corridors command full sweep of country

to south, east and west. Paved breezeway area below classrooms serves as student recreation space and outdoor corridor, is used often for outdoor dances and pep rallies.



Floor plan (shown at right) shows relationship of Kellogg's three elements (arrow points north). Elevation sketch of a typical classroom wing section (above) shows how south sunlight bounces across corridors into classrooms, which also receive north light. The building's second and third levels (right) have single-loaded "cloister" corridors.





(Text Continued From Page 66)
is anchored on the side of the hill east across the gulch. The west end is cantilevered over the one-story administration-service wing, which runs at right angles to the north. Gymnasium and cafeteria extend from the administration wing.

Placement of the classroom block across the creek and valley, with the other element parallel to the valley, underlines the influence of site on building design. Even more important is the glass wall, steel frame design of the classroom block, which takes full advantage of the setting's remarkable view. This was, of course, made practical by the surrounding mountains, which shelter the building from direct sunlight part of the day.

"FLOATS" ACROSS VALLEY

Benefits of the floor-to-ceiling glass wall construction of the classroom block are evident from both inside and outside the building. From the outside, the structure seems to be a bright rectangle floating across the valley against the dark mountainside. The inside activity and color are part of the outside design.

The floor-to-ceiling view of the surrounding mountains from inside the classrooms and corridors serves to emphasize the community's dependence on, and its close relationship with, the land around it. The fact that students can see down into Jackass Creek from inside the school building underlines

Kellogg's home economics room is in the administration-service wing, next to the school cafeteria. It faces east, opening onto outdoor recreation area, Jackass Creek, main classroom block, and breezeway. Not shown in the photograph are facilities for cooking, sewing and storage.

this relationship with its natural surroundings even more strongly.

Improved lighting is another important benefit of the steel and glass construction. The glass walled corridor on the wing's south side serves as a sun porch for the classrooms on the north, which also have floor-to-ceiling glass walls. With this flood of north light, and the sunlight "bounced in" from the corridor on the south, classrooms all have bilateral natural daylighting.

In addition to fitting the site, the tri-level "L" plan has meaning academically. It separates, by levels, the classroom and administration-service areas. Thus, library service and administration areas are conveniently close to, but separated from, the classrooms. Principal's office, reception area, and library are directly under one end of the classroom wing.

Vocational arts facilities—home economics room and metal and wood-working shops—are in the ground floor unit, apart from the quieter classroom spaces. The shops are at the southwest side of the building, alongside the gymnasium. Home economics spaces are across from the administration rooms, and not too far from the school cafeteria.

This cafeteria for the present doubles as a little theater-auditorium. The

gymnasium serves as an auditorium for larger groups. The reception room-administration office area and library are just off the main entrance. This makes the school's administration office an inviting, accessible place and also attracts student interest in the library. The audio-visual classroom is on the ground floor, just across from the library, which serves as the central repository for all teaching materials.

The band practice room, music library, and practice studios are also apart from the quieter sections of the school, at the extreme north side of the ground floor.

RECREATION AREAS PLANNED

Outdoor recreation areas have been planned, although not all are complete. One such space that has proved quite popular with students is the outdoor "breezeway" under the classroom wing, between the administration-library block and the stream. This shelter serves as an outdoor corridor for students going from one end of the building to the other and as an informal gathering and lounging space. It is also used often for outdoor dances and pep rallies.

The Jacob's Gulch slopes can serve as natural spectator stands for games in the outdoor recreation spaces. Other outdoor recreation areas, tennis courts,

and team and band practice areas have been provided for in the site plan, directly south and north of the building. These have been planned for easy access from the gymnasium and band room.

As Supt. Andrews sees the job for his district, Joint Class A District 391, the school system has four clear-cut objectives:

1. To prepare the some 35 per cent of high school graduates who go on to college for advanced work.

2. To provide a large percentage of the graduates with the vocational skills demanded by local businesses and the mining companies.

3. To express and encourage the community's interest in music through its curriculum and through sponsorship of and cooperation with local concert and entertainment programs.

4. To provide an extensive night-time adult education program, largely centered on vocational and citizenship training.

The new building was planned to carry out these goals as effectively as possible within the limits of the building budget.

"SPLIT CURRICULUM" USED

To provide for the first two objectives, Supt. Andrews inaugurated a "split curriculum" high school program. This includes an accelerated curriculum for students who plan to go to college. The general curriculum provides basic secondary education and skills in vocational arts for those who plan to go to work after graduation. Subject matter covered in the two programs overlaps in many areas, and a student in the general group could meet

college entrance requirements. The general curriculum, of course, places more emphasis on metal working, woodworking, home economics and mechanical drawing, although some vocational courses are required of all of the students.

Teaching and study methods in the two curriculums differ sharply. While general program courses are taught formally, with guided study and projects, students in the accelerated program are encouraged to develop their own methods and materials. Within the limits of the course subject matter, they are free to follow their own interests and study methods. Most accelerated classes are taught less formally, with class guidance by instructors only when necessary. Students are placed in their respective programs according to their own desires and plans,



Business training is important in this community, and ample space is provided for it. This typing classroom adjoins a shorthand and transcription room. Floor-to-ceiling glass walls flood area with daylight.

Some 65 per cent of graduates will be seeking employment with local mining companies and other businesses. Field observation trips add meaning to classwork preparing students for a variety of industrial jobs.





Stairway at the entrance area combines the building's rich variety of materials: stone, steel, glass, plaster, acoustical tile, brick. Entrance to breezeway is in the background.

and on the basis of their scores in intelligence, achievement and aptitude tests.

With this variety of teaching and study methods in the programming, the building had to be planned for as much flexibility as possible. All seats are movable. Classrooms have room-length storage units for teaching materials, and all spaces are open to provide areas for group or individual, academic or activity study.

SCIENCE EMPHASIZED

An attempt was made to embody in the building the freedom and flexibility that are the essence of the school's accelerated teaching approach. It and the school's program reflect the technological and land-oriented goals of the community—for example, the great need for engineers, mining men, and carpenters.

The high school program provides for this need by emphasizing science courses, geology, mechanical drawing, metal working and woodworking. A large "technical" area accommodates the mechanics and woodworking shops with welding and metal-working rooms,

tool room, paint room, lumber storage and project storage spaces, woodworking tool room, shop locker and shower room, and an industrial arts classroom. For the girls' "vocational" training, there is the home economics room, which includes complete cooking and kitchen facilities, sewing area, and general purpose space.

The science rooms—two of the largest of the 12 classrooms—are at the west end of the classroom wing. A geology class need only look out the window wall in any of three directions to see what the textbooks try to say. Kellogg biology classes are, like the community, deeply concerned with conservation and reforestation. These classes have, in fact, done much to replant and reclaim the scorched land around their school. And all the biology students must do to see how the conservation principles are working is to look out.

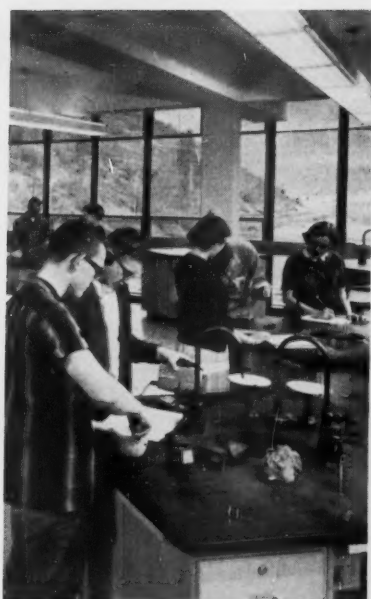
Much of the area's business looks to Kellogg High for its source of office help. So there are special typing and transcribing classrooms, as well as general classrooms for shorthand and bookkeeping courses.

Some school people may be surprised at the amount of space and the facilities provided for the music department: a band practice room—which will hold its 100 piece band—three practice studios, a music library, and an instrument storage room. But the community has always been deeply interested in music; it has supported a concert series for years, several local choral and music groups, and regular musical variety reviews presented by the school.

MUSIC SHOWS POPULAR

One recent school music show played to a total audience of 3500—this in a community of 6000. Single performances have attracted audiences of as many as 1000. Kellogg High music groups always are among the top winners in state and regional music festivals, and the band is much in demand for local and state parades and programs.

If there is one regret Supt. Andrews has about the new high school building, it is that budget did not allow for a separate auditorium to provide better facilities for community concerts



Interest focuses heavily on geology and conservation. This general science laboratory gives students a view of the terrain and plant life they're studying.



Since the community's mining industry requires trained carpenters, metal workers, machinists, this metal shop serves vocational, general and adult programs.

Set high in a small valley, Kellogg High is truly a "school with a view." The building's open design gives students a refreshing view of the countryside all around. View from this science laboratory table is south, toward town, mine head, smelter and the vast, circumscribing mountain backdrop.

Billy Hope picture



and shows. He hopes to build such an auditorium in the future, but until that time the school gymnasium is serving as a school and community concert hall.

Local and community groups of all kinds—music, business, social and civic—are encouraged to use the new building's facilities for meetings and programs.

Audio-visual facilities are centered in a classroom in the administration-service wing. Because of the school's remote location, rental audio-visual materials are not readily available and thus are not integrated into the teaching program as in many metropolitan areas. The district does not have a budget to build a film library, and scheduling problems make it difficult for teachers to fit films into their course planning. Other visual teaching materials are used more frequently than films and recordings are.

The high school principal, Leslie A. Larsen, feels that the open, outdoor oriented design has been completely responsible for a new high in morale among the teachers and a new relaxed, orderly behavior among the students. A walk between classes in the glass walled corridor is not unlike a promenade along a scenic trail.

(Text Continued on Page 73)



A dam on the creek, north of the school, provides a private water system. Biology students help check purity standards by running bacteria tests — a practical learning situation.

Students at Kellogg are extremely proud of their new school and have made every effort to perpetuate its atmosphere of newness. Picture (below) shows how wearers of galoshes went to the trouble of placing them on paper to protect wardrobe shelving.



Kellogg's school administrators wanted the students to feel at ease and at home with their supervisors. Thus, the principal's office and reception area, at the entrance, are open, accessible, friendly, separated only by glass wall.

Both the library and its current fare offer their friendly invitation to browsing with this "see through" display case mounted on a glazed partition opposite the principal's office in the lobby. Good illumination assures attention.





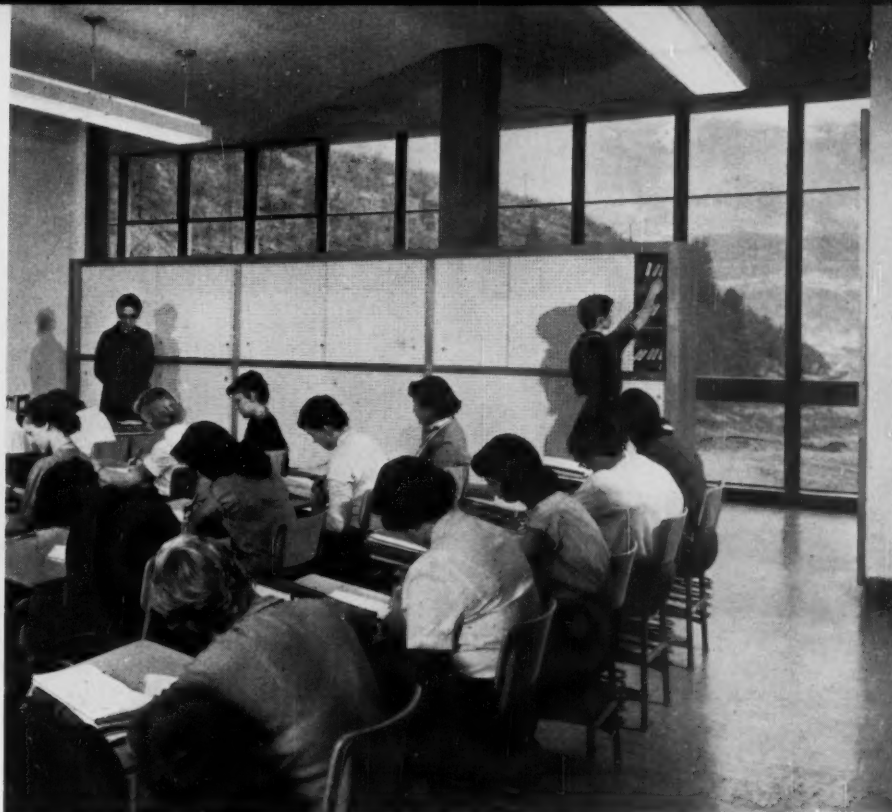
(Text Continued From Page 71)

Color, too, has been used to great advantage in the building. Classroom partitions and corridor walls are painted in bright primary colors for a warm, stimulating effect.

There are no classroom doors; the only partitions between corridor and classrooms are free-floating locker-storage units. Thus, south sunlight coming in through the corridor glass wall streams around, under and over the partitions into the classrooms. This open partitioning is intended to make students and teachers feel the relationship of their class and themselves to the whole school community.

Surprisingly enough, even with the open partitioning, the school has a quiet, orderly air, even during class changing periods. No teachers have complained of noise or distractions from other rooms or corridors interfering with their classes, partly, no doubt, because of the acoustical tile ceilings and asphalt tile flooring.

The large areas of glass walls in the corridors could create an overheating problem—from direct rays of sunlight—in the classroom wing. To solve this problem, and to provide controlled heating and ventilation, mechanical unit ventilators are the main elements of the school's heating system. There is auxiliary radiation in the corridor, but the main heating and ventilating load is carried by unit ventilators in each classroom. The open partitioning



Classroom wing corridors (above, left), open to the outdoors on the south with glass, provide the school's sun porch. The only partitions between corridors and classrooms are free standing locker-storage units. View through classroom (above, right) is from storage unit side of partition, shows how sunlight is bounced into room, across corridor—above, below and around partitions. There are no doors to classrooms. Acoustical ceilings and other materials contribute to apparent sense of orderly and quiet self-discipline.

permits better circulation between classrooms and corridor, thus offsetting some of the solar heat gains from the south elevation.

In several places, building construction was influenced by the character of the area, the climate and geography. Roofs, for example, had to be designed for a 40 pound snow load, and brick work was reinforced with steel reinforcing bars. This reinforcing was done for two reasons: Kellogg is located in the Zone 2 of seismic probability, and reinforcing also permitted use of thinner walls.

LOCAL STONE USED

A local stone is used for accent around the entrances and as a veneer over the abutment supporting the east end of the classroom block. Instead of using a gravel fill to level the surface under the ground slab, the architects used slag from the near-by smelting plant. This slag was cheap, noncorrosive, and has good compaction.

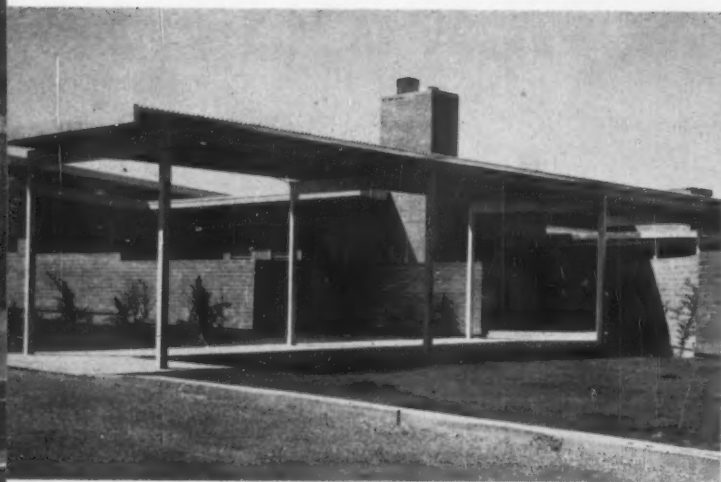
Of course, the building of Kellogg High School has not solved all of the community's problems. But one thing is clear—the building did provide the

first tangible symbol of the civic re-awakening which ultimately will solve them.

Since the mining company has changed its once paternalistic policies, it is contributing almost half of the town's tax revenues; it has released its land holdings wherever possible, allowing for future expansion of the community; it has sold its business and housing interests; it is taking effective steps toward eliminating the fumes from its smelters.

Since the completion of the new high school, the citizens of the Kellogg area, too, have begun to respond. They have employed a city planner to help relieve congestion in their town and to guide an orderly future growth. They have drawn a master plan for expansion and rehabilitation of the area; they have passed a zoning ordinance. They have passed, by great majorities, several improvement bond issues—for new water districts, and for a \$1,095,000 hospital.

Truly, Kellogg High School is a symbol of a reawakened pride. It represents a school system that is showing a town a better way. #



OFF-STREET LOADING ZONE, service yard, and incinerator help keep schools at Tucson, Ariz., safe and clean.



OFF-STREET PARKING for school employees protects their cars, avoids congestion, keeps the neighbors happy.

In schoolhouse planning

It's the Little Things That Count

ROBERT D. MORROW

Superintendent, Public Schools, Tucson, Ariz.

PROFESSIONAL magazines, workshops, conventions and the American Institute of Architects all have contributed materially toward the upgrading of school design and construction during the past few years.

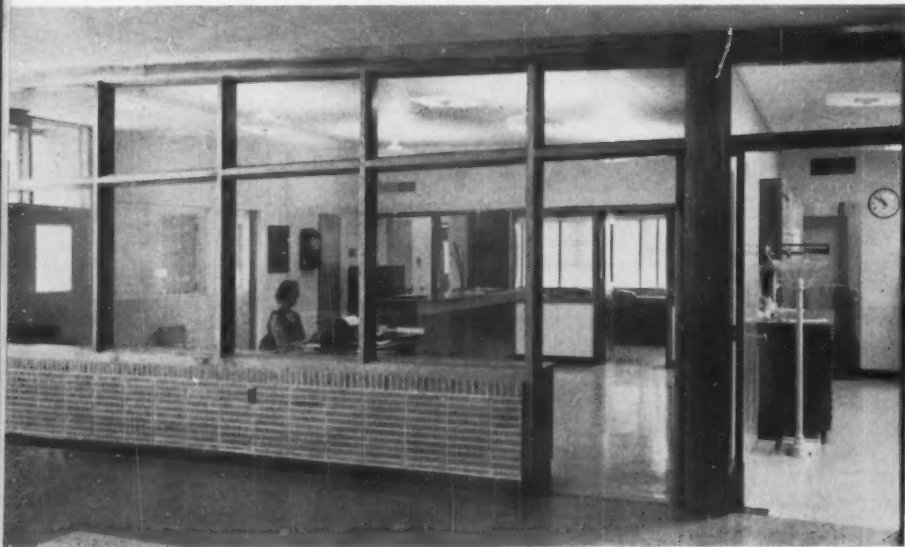
New schools are attractive, safe, functional and economical—both in original cost and for maintenance and operation. They are found everywhere—in large cities, in small towns, in rural areas.

ADMINISTRATIVE OFFICES are designed to facilitate accessibility from corridors. Principal's office is at left.

Wherever one goes, superintendents of schools, business managers, and superintendents of buildings and grounds are glad to share ideas with all who take the trouble to request help.

Some of the ideas we have picked up all over the country and incorporated in our new buildings are illustrated in this article (the pictures show some sites not yet fully developed). To assemble the ideas, we visited hundreds of school

COUNTER HEIGHTS are planned for little folk, as well as for adults. Note abundance of borrowed daylight.





FENCED SCHOOL GROUNDS, frowned upon by some planners, keep traffic off the grounds and children off the street.



ON-GROUNDS PARKING LOT space is provided at the high schools for boys and girls, as well as for the employees.



BICYCLES, too, have their allotted parking space at junior high and elementary schools, near the buildings.



EXTERIOR DOORS of Tucson schools are metal—stainless steel, enameled steel, or aluminum—for low upkeep.

systems, from New York to California and from Texas to the Canadian border. To all our gracious hosts and helpful associates we extend our thanks.

Also included in the illustrations are new ideas such as we have been able to develop occasionally in our own engineering and maintenance department.

FLOOR GRATES help children scrape sand and gravel off their shoes, thus minimizing damage to floor covering.

DOORS can shut off multipurpose rooms and other night-time facilities from classroom area, reduce maintenance.





LIGHT CONTROL for this north exposure (above) is a slight roof overhang. Other rooms are shielded by a louver type of sun screen, window shades, or venetian blinds.



THE LOUVER type of sun screen may be impractical in areas where the sun shines less frequently and not so brightly. Architects tried almost everything to control glare.



TILE WAINSCOTING in the halls and tile around the door joints are making the cleaning easier, less costly.



TEACHERS' WORKSHOPS are pleasant places, permit concentration away from the hustle and bustle of the classroom.



WASHROOM FIXTURES are child-sized. Wall vents are placed low at the source, to eliminate objectionable odors.

SINKS now used in the elementary areas (left) are more accessible than wall units, provide liberal work surface.



EQUIPMENT of all kinds helps make learning fun, assures its retention longer than if children only read books.



CHALK LEDGES are 4 inches wide, can be used as easels for pictures borrowed from the school circulating library.



COAT CLOSETS in Tucson schools are small, at times nonexistent. Cabinet at picture's left has proved adequate.



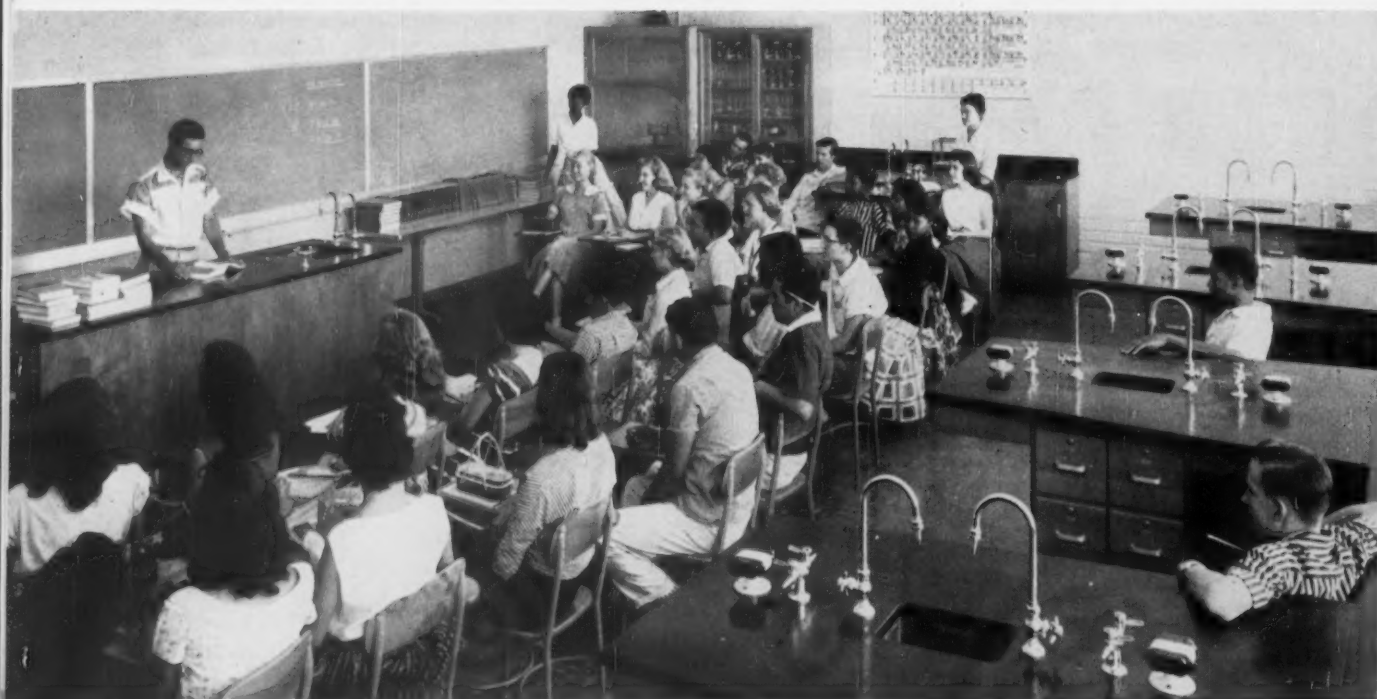
AN ACTIVITY CORNER is part of each elementary room. This serves to create a friendly learning environment.

CLASSROOM PLANNING has assured comfortable work and play conditions for the children.





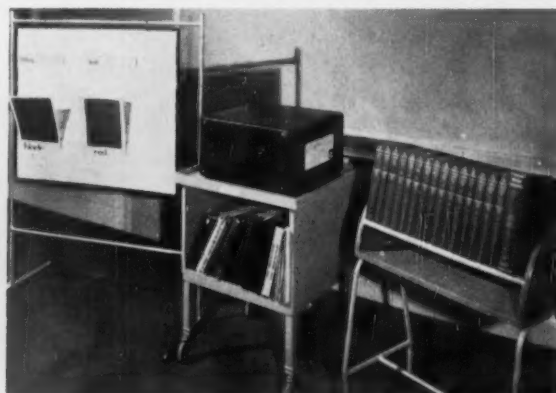
RETURN CHUTE for books is convenient for hurrying students. The bookstore (left) has an easy flow of traffic. It has done as much as \$175,000 business in one year.



SCIENCE AREAS are used both as laboratories and as classrooms for the efficient use of space.



PASS-THROUGH (at left) saves many steps. Equipment shown below was built by the maintenance department.





ADEQUATE STORAGE is a "must" in the art room. Plates are used as palettes. Storage space at the rear of the band room (right) and practice rooms are important.



THEATER-IN-THE-ROUND is a significant element of the high school program.

LOUNGES for both students (left) and teachers (right) provide pleasant surroundings. The style of the furniture reflects openness of the building design, adds interest.





CAFETERIA SERVICE is provided in a covered exterior area for all of Tucson's junior and senior high students.



BENCHES of reinforced concrete save floor space. Floor drains and exhaust fans keep the room dry, air fresh.



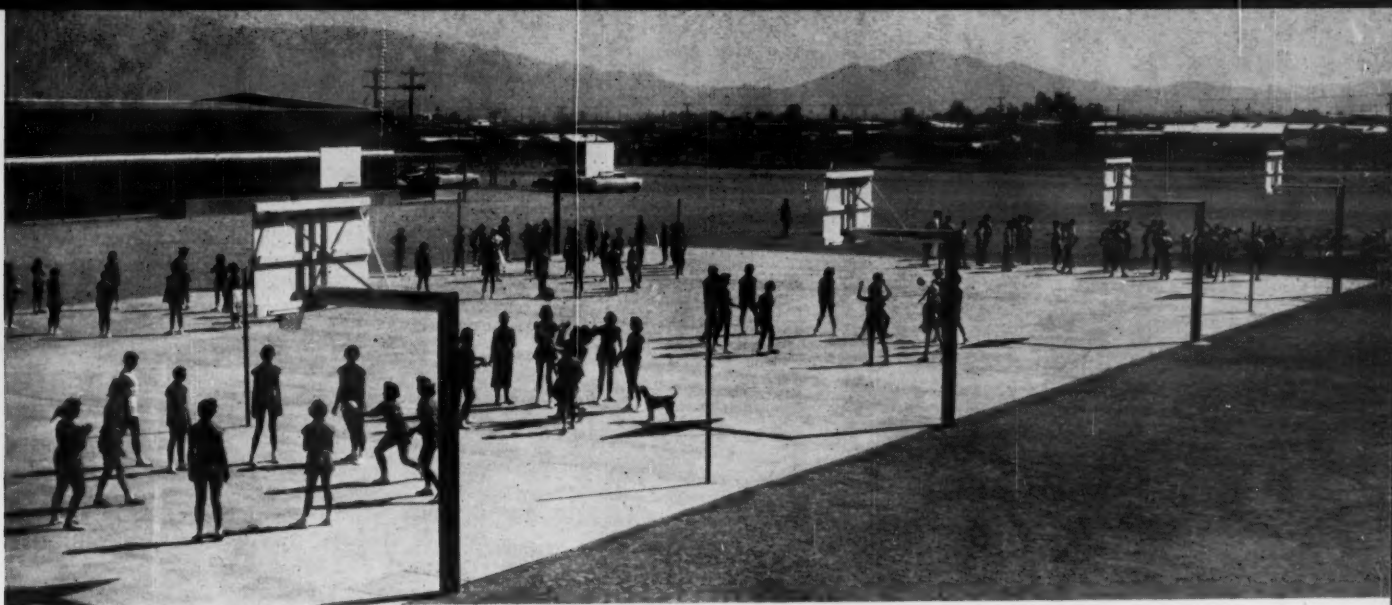
STORAGE SPACE at new high schools is adequate for yard machinery and athletic equipment. Entrance is roomy.



TOILETS and urinals properly placed keep shower rooms as "shower rooms." Entire area is tiled and heated.

PATIOS of junior high schools are put to many uses. Area shown had not yet been landscaped.





GYMNASIUMS are replaced in Tucson by year-round outdoor play areas, which have excellent shower facilities.



RAMADAS provide shade for lunch, rest and even classrooms (above, left and right). At the right, a new unlandscaped patio furnishes primary children with outside room.



PATIOS (below) are the focal center around which many elementary schools and some junior high schools are built, forming an all-nature classroom extension, much enjoyed.



If the Joneses want to go to Florida in March,
taking Junior along, the principal is faced with the problem of

What to Do About Winter Vacations

GEORGE PROPECK

Principal, Junior High School, River Forest, Ill.



ONE of the continual and persistent problems that confronts the River Forest public schools is the mid-winter vacation problem. Many of the parents in the upper and middle-upper income brackets insist upon taking their children with them when they take their annual winter vacations in Florida and other southern states. This practice placed undue burdens upon the teachers because the parents expected lesson plans and study guides to be prepared prior to their departure on the parents' well deserved vacation in the balmy South.

After much faculty discussion and after many suggestions had been submitted by staff members, it was decided to handle the problem on an individual family basis because only a minority of the families request the privilege. Parents are sent the essence of the policy in a personal letter, reproduced below.

Dear Mr. and Mrs.

This is a confirmation of our discussion relative to 's absence during your contemplated trip to

As you recall, I mentioned that he could take his workbooks with him and keep the assignments up to date. He should be able to estimate the assignments to be completed by the amount of work accomplished to date. We discourage pupils from taking textbooks out of the district under any circumstances.

It is desirable for you to encourage the reading of books and to review with him the current issues of periodicals or the daily newspaper, and to encourage him to keep informed on current events.

Material or information which can be used to supplement previous or future assignments should be acquired for reference or project use.

Prior to the inauguration of the current policy, a study of winter vacations was conducted. After the results were tabulated, it was evident that the eighth grade pupils comprised the largest group of mid-winter vacationers. Twelve of 92 eighth graders were withdrawn from school by their parents for these unauthorized vacations. The absence periods of these pupils ranged from a few days to a few months.

The eighth grade is the terminal year in our school system. One parent explained: "We feel that our son should accompany us during our vacation this year because we know he won't be permitted to be out of *high school* without a health permit." Of course, the age and maturation of the pupils are important factors to be considered in determining whether a pupil should be permitted to go on a vacation.

Teachers are discouraged from outlining or assigning work prior to or during the absence; however, will be expected upon his return to be responsible for the work missed and will be expected to complete the projects and take the tests just the same as the pupils in full-time attendance.

One of the most successful technics to provide continuity in assignments is for the children to arrange for classmates to jot down all assignments and to give them to the absentees upon their return or to mail them in the event of a prolonged absence. This procedure will ensure the opportunity for makeup work.

We hope that you have an enjoyable trip.

Cordially,

School Principal

The school staff also noted that several families made it a practice to plan winter vacations without observing the school calendar. (At least some families withdrew their children each year on dates which corresponded with the dates the children were absent during prior years.) Our records now verify the desire of and attempts made by parents of junior high school youngsters to plan their vacations when school is not in session.

The delayed action result of the policy has been most encouraging. The requests have diminished in number year by year. Seldom do parents request permission to withdraw their children from school two consecutive years. This may be attributed to the emphasis placed upon the importance of school experiences and the stress placed upon the rôle the pupil (not the teacher) should assume in accepting the responsibility for the makeup work after he returns.

The statement in regard to taking textbooks out of the district has merited some discussion. The textbooks are owned by the district and are rented to the pupils. Some difficulty has been encountered in recovering textbooks taken by pupils on what originally started as a mid-winter vacation but later developed into a permanent transfer. Parents who want copies of the textbooks are encouraged to purchase them from the district at school price.

In general, the policy has been well accepted, as evidenced by the lack of complaint and criticisms. It has been successful in view of its aim, namely, to reduce the number of pupils taking mid-winter vacations and to place the responsibility for makeup work with the pupils and their parents. #

What Classroom Teachers Say About Merit Rating

ROBERT A. SKAIFE

Field Representative, National Education Association, Washington, D.C.

Report on Conference Sponsored by Department of Classroom Teachers

THIRTY classroom teachers, carefully selected after consultations with state presidents of classroom teachers associations, met in Washington, D.C., November 23 and 24 and worked diligently to find answers to such questions as: What is merit rating? What are the beliefs and convictions about merit rating? How can we implement our beliefs and convictions about merit rating?

In planning the conference, the N.E.A. Department of Classroom Teachers invited teachers who have had experiences with what is popularly called "merit rating." Seven teachers taught in school systems which have put in practice a merit-rating program. Two teachers came from school systems which had abandoned merit rating. A few teachers came from school systems which are being strongly pressured by community groups to adopt merit rating. Two teachers had worked with state legislative committees set up to explore the possibilities of merit rating on a statewide basis. Those who planned the conference thought, therefore, that the group represented a cross section of opinions on this subject.

This conference was not the first that the N.E.A. Department of Classroom Teachers has held for the purpose of studying merit rating. In 1954, one of its study committees concluded "that subjective rating on specific items in a check list limits the growing teacher; that no system exists which fairly and adequately measures human growth in all its various facets, and, further, that, where teaching conditions are right, good teaching will readily develop and merit rating will be superfluous." At the N.E.A. convention at Portland in 1956 classroom

teacher groups restudied merit rating and voted against it. The Department of Classroom Teachers passed the following resolution:

"The department, after a considered review of the large volume of available evidence, reaffirms its stand in opposition to current merit rating or incentive schemes as they relate to salary scheduling. The department believes in continuing research in determining objective criteria for salary scheduling, but it maintains that experience to date has shown conclusively that basing salaries on merit rating destroys professional relations, creates professional strife, and impedes the cooperative improvement of education by teachers and administrators."

At this point one might appropriately ask why the N.E.A. Department of Classroom Teachers, after having taken a stand against merit rating for salary purposes, called another study conference. One answer lies in the resolution quoted—continuing research for objective criteria for salary scheduling. Another is the fact that classroom teacher groups are being forced through pressures brought by citizens to come forth with salary schedules including the merit-rating principle or show good reasons why the principle will not work. Still another answer lies in pressures coming from administrators and school board members who approve of merit rating.

In one of the opening speeches at the study conference Hilda Maehling, N.E.A. assistant executive secretary for professional development and welfare, stated that classroom teachers must take the lead in coming to decisions on merit rating. She asked:

Do we have schedules sufficiently

high so that we can turn to merit salary schedules?

Does the present interest in merit rating grow from a real interest in teaching, or is it motivated by a desire to economize?

Should the general level of salaries be raised or should just a few be rewarded?

After pointing out the semantic difficulties of the term "merit rating," Miss Maehling urged the group to try to find a common denominator in the factual descriptions of the merit-rating programs which were to be presented.

The first part of the conference was devoted to descriptions of merit-rating plans. Summaries of these follow:

Leon County (Tallahassee), Florida, uses a rating system based on points. It makes possible a range of \$1200, due to rating, between two teachers of equal training and experience. Starting with a base of 110 points, a teacher can earn \$10 per point for each point above 110 to a maximum of 160. For each point below 110 points, the teacher loses \$10. The minimum is 40 points. A teacher cannot earn more than 10 points in any one year.

The rating is now done by the building principal, who uses an appraisal sheet and usually calls in a teacher and discusses it with him.

Some benefits noted were a marked improvement in teaching, better student work habits, higher grades on college entrance examinations, and a keener interest in professional growth on the part of teachers. One weakness was noted. High ratings given to a few teachers occasionally cause bitter feelings among other teachers.

Grosse Pointe, Mich., employs, in addition to the basic training and experience qualifications of most salary schedules, a job classification feature. The Grosse Pointe program has been erroneously labeled "merit rating."

There are three schedules for teachers. Schedule A involves a normal teaching load; Schedule B, a normal load plus some additional activity; Schedule C, a normal load plus activities involving more responsibilities than those in Schedule B. A difference of about \$250 exists between A and B and between B and C.

Other than the first step on the schedule, there are no automatic promotions. All increments are earned, and there are several ways to qualify for them, ranging from college credit courses to educational travel.

The community appears to approve of the plan. People feel that teachers are making progress and deserve their salaries.

Ladue, Mo., has a merit plan that stresses the importance of the "democratic way of life." The plan is designed to reflect a philosophy of education in keeping with democratic concepts.

There are three salary schedules. The first ranges from \$3600 to \$5600, with annual increments of \$250. The second schedule ranges from \$4300 to \$7500, with increments of \$400. The third schedule ranges from \$5400 to \$10,400, with \$500 annual increments. Promotion from one schedule to another depends on evidence of competency.

The evaluation of a teacher's proficiency goes on continuously, but the building principal assumes the major responsibility for rating teachers. School officials admit that the evaluation procedure is subjective, but they defend their rating process by concluding that effective teaching cannot be measured objectively. If a teacher disagrees with the evaluation made by his building principal, he may consult with the superintendent. A conference involving the parties concerned is called to resolve the disagreement.

It is the responsibility of a standing committee on teacher evaluation to work continuously on the "Criteria for Evaluation" which are used to rate the teachers. Both teachers and administrative staff are represented on the committee. The criteria sheet in use has three main divisions: personal qualities of the superior teacher, professional qualities of the superior teacher, and evidences of superior teaching.

Questionnaire surveys indicate that the Ladue teachers like their merit plan.

West Hartford, Conn., has a "Career Teacher Award" plan. It grew out of a five-year study to work out an administratively sound means of rewarding teachers who give outstanding service to the schools and the community. It is a supermaximum plan which permits a teacher nominated by the teacher's principal or by any three fellow teachers to receive three additional increases of \$500 each beyond the normal maximum.

A screening committee composed of the superintendent and other staff members uses a criteria sheet to select the "career" teachers. During the past year, out of 88 teachers who reached the normal maximum, 15 were awarded the first step of the school system's "career" classification.

The West Hartford superintendent has indicated that the "career" plan will be successful only if the West Hartford salary maximums are at least equal to those of comparable school systems.

A poll taken in 1955 indicated that 85 per cent of the teachers approved of the plan.

Alton, Ill., has had a merit-rating plan since 1942. For several years a system of rating teachers numerically was used. Teachers say that the biggest advantage in the present practice is the absence of numerical rating.

The principal fills out a rating sheet which contains three main headings: attitude, efficiency and personality. A place is provided at the bottom of the sheet for the teacher's signature. If he signs the sheet, his signature is interpreted to mean that he accepts the rating. He is not compelled to sign it. From this rating sheet is determined the salary increment, if any, to which the teacher is entitled.

Because of a low maximum salary on the regular schedule the small increments provided as merit raises do not, in the opinion of many Alton teachers, make the merit feature particularly significant.

On the positive side many teachers believe that the Alton merit plan has helped improve the quality of teaching. The chief criticism relates to the general criticism of all rating scales—inability of the rater to do the rating objectively.

Following the presentations just summarized, representatives from

Phoenix, Ariz., and **Evanston, Ill.,** gave accounts of actions taken by teachers in opposition to merit rating in their school systems. Phoenix abandoned its merit rating plan in 1951 largely because it seemed to lower teacher morale. Under the Phoenix plan the decision as to who should reach the supermaximum (five steps above the regular maximum) was made by the superintendent. The few selected were regarded by their colleagues as "fair-haired boys."

In Evanston, teachers studied the merit features of a salary schedule which provided for acceleration on the schedule and bonus grants. They concluded that these features were undesirable and should be dropped. They reasoned that in a school system like Evanston's several assumptions should be made, namely, that teachers employed are well trained, are placed satisfactorily, receive adequate supervision, and are evaluated. If these assumptions are valid, then merit rating is unnecessary.

The participants were then assigned to discussion groups to consider the question: "What are our beliefs and convictions about merit rating?" Each of the groups worked on a definition of "merit rating." Preliminary reports of group discussions led to a general discussion of proposed definitions of "merit rating." The participants in this general session could not agree on a definition. In the group discussions which followed points of disagreement were considered. Before the final session began the main difficulties had been ironed out.

This is the definition of "merit rating" worked out by the study conference:

"On the basis of past and present practices, we suggest to the Department of Classroom Teachers that 'merit rating' be defined by the department as a subjective, qualified judgment of a teacher made administratively by one or more persons, with or without the knowledge of the person rated, for purposes of determining salary."

Final reports from each of the four groups summarized the advantages and disadvantages of merit rating. Each of the groups distinguished between rating and evaluation, recognizing that the latter term related to the improvement of the teaching-learning process. Attention was directed to the distinction between the two terms made in the pamphlet "Better Than Rating": "Evaluation is a broad term covering

all forms of judgments, even rating. Teacher rating is thus one, though not necessarily the best form or type of evaluation."*

The consensus in each of the groups was in opposition to merit rating as defined by the study conference. Long lists of arguments against it were compiled. Here is a partial list of disadvantages reported by one group:

There are no accurate means at present of measuring pupil growth or teaching effectiveness.

Philosophies vary greatly concerning the qualities of good teaching and methods.

Merit rating tends to lower morale, since it forces teachers to compete with one another for salary increments. Beginning teachers' salaries are low in comparison with starting salaries in other professions. Therefore, raises must be often and large enough to elevate teachers to professional status.

Merit rating tends to force conformity to preconceived ideas of some person or group of persons, which tends to repress initiative and individuality necessary for creative teaching.

Merit rating discourages experimentation.

Merit rating forces cooperation rather than growth in democratic procedures in problem solving.

Pupil differences are so great that quality of instruction cannot be fairly evaluated.

Merit rating is usually an administrative technic of controlling educational costs of instruction rather than the promotion of better teaching.

Social services to human beings consist of many intangibles which contribute greatly to the education of the whole child. These cannot be measured. Merit rating is teacher centered rather than pupil centered. There are no known best methods of teaching.

Merit rating tends to reduce cooperation between teachers and between teachers and administrators.

Merit rating conditions teacher attitudes, which can be detrimental to pupils.

Merit rating reduces professionalism in teaching and tends to reduce teachers to the rôle of laborers rather than competent professional employees. It forces supervisors to become inspectors rather than professional leaders in improvement of instruction. Merit

rating in education is not compatible with merit rating in industry since in education the raw materials vary greatly in all aspects and cannot be controlled in the same manner as in manufacturing a product. Emotions enter into teaching and the teaching process. These cannot always be controlled or measured.

MINORITY REPORT FILED

A few members in one group filed a minority report. They cited the following as advantages they have observed in merit-rating programs now in operation. Merit rating:

Brings about a closer relationship between teacher and administrator.

Encourages cooperation and sympathetic understanding among coworkers in a school.

Encourages self-evaluation for professional growth.

Creates a greater appreciation of the teacher's total service through the higher salary paid.

Promotes competency in teaching.

Attracts and holds competent classroom teachers.

"The good teacher will not fear merit rating," concluded the reporter.

Despite the general opposition to merit rating, most of the participants thought that they should come forth with a positive approach concerning some things that could be done. A typical example of this attitude appears in the summary given by one of the group reporters. Here is an excerpt from her report:

"We made a list of what we thought classroom teachers could do:

"1. Support with every nerve and sinew good salary schedules. We agreed that a good salary schedule should be cooperatively arrived at and include training, experience and some sort of job classification, and emphasize professional growth, travel, community service and special professional experience. You can find many fine salary schedules.

"2. The second thing we should do, we thought, was strive for constant self-examination and group evaluation.

"3. The third thing we should do is to work for larger teaching staffs and improved technics in supervision. One of the weakest spots in the whole teaching-learning process is the lack of adequate supervision during the probationary period.

"4. We need to encourage and respect wise and able leadership. A great deal has been said about the bad ad-

ministrator, but not enough credit has been given to the good one.

"5. We felt that, even if merit rating or any other idea which is presented to the profession should strike us as wrong, as unfair, or as unworkable, the classroom teacher should be ever on the alert, always with open mind, to find any new means of professional growth.

"If we as classroom teachers each did all these to the best of his or her ability, individually and as a group, then the things that are wrong with merit rating might be corrected. By this process we would arrive at standards that would create a good environment for cooperation and that would promote confidence and trust among the entire staff. This process would encourage an atmosphere of self-evaluation, creativeness, initiative and originality. It would center education on the child and not on the teacher. It would stress the entire school system rather than any particular teacher. It would separate evaluation from merit rating and thus make possible greater experimentation in the field of teacher competence. It would gain public support for professional salaries for all teachers rather than support for only a few. Finally, it would aid in recruiting desirable new teachers."

CONFERENCE OPPOSED MERIT RATING

In the final general session the participants went on record as opposing merit rating as it had been defined. They affirmed their support of *evaluation*, which was defined as "that continuous process by which individuals or groups cooperatively make choices and come to decisions in planning for the improvement of instruction." They passed a motion that the rôle of the N.E.A. Department of Classroom Teachers should be:

1. To make available the conclusions of this conference to the classroom teachers on state and local levels.

2. To take the lead in establishing a public relations program in support of the department's views on merit rating.

3. To continue its cooperation with other departments of the N.E.A. in interpreting the department's philosophy on merit rating as herein defined.

In passing these motions the participants recognized that they could not speak for the N.E.A. Department of Classroom Teachers. The motions were, in effect, recommendations to the department. #

* Association for Supervision and Curriculum Development, National Education Association: *Better Than Rating*, Washington, D.C., 1950, p. 9.

Chalk Dust

FREDERICK JAMES MOFFITT



Mr. Chalk Dust contemplates the materials of superintendency. He is preparing the hamburgers for his public.

CHEERFUL EARFUL

*The Ego of the Boss was low
As troubles mounted by the hour.
The morning mail was full of woe;
The faculty was sour.
The football team broke sundry
bones;
The lab exploded with a bang,
And all the spiteful telephones
Just rang.*

*Up spoke his Id, "Life isn't play.
Some days you can't expect to win;
Today is just another day,
So, brother, smile and jut your chin.
What matter if the job is tough?
Cheer up, it might be worse be-
cause—"*

*So up he cheered and, sure enough,
It was.*

FACTS FROM SUGARTOWN

THE ACTUAL CIRCUMSTANCES surrounding my sudden so-called "resignation" from the superintendency of the Sugartown schools have been so exaggerated and publicly misunderstood that, in deference to my professional standing, which is pretty much nonexistent at the moment, I am impelled to set forth the true facts of the case.

A few weeks ago my daughter Sue happened to leave one of the more

pulchritudinous movie magazines in the bathroom, and my eye was caught by an article which said that Rin-Tin-Tin, evidently some famous character that performs for the movies, had demanded a raise of \$1000 a week in view of the cost of high living. Hoping that my board of education would take the hint, in a more modest way, of course, I took the magazine to the monthly board meeting. The board members spent a great deal of time in viewing the various magazine illustrations, not including that article on Rin-Tin-Tin.

At the following meeting, the board came back with a rebuttal in the shape of a most disturbing article in the *New York Times*. The *Times* reported that Prof. Edred J. Corner of Cambridge University had found a way to replace men with monkeys. The monkeys were used to explore the tree-tops of Malaya and did a better and more economical job of collecting rare specimens than had the men they replaced. According to the *Times*, they completely revised the old method of felling the trees.

After this article was read, one word led to another as is customary with the Sugartown Board of Education, and several personalities, including mine, were exchanged. As a consequence, I "resigned," as we educators

say so euphemistically when we are suddenly terminated due to conditions beyond our control.

In thus candidly setting forth the true facts of my termination, I hope my successor does not take umbrage at any implications which he may find therein. I warn him, however, to watch out for any further monkey business.

IMAGINARY INTERVIEWS

The Clown

New York (AP)—A former high school teacher with two college degrees has signed a contract as a professional clown. William Britten signed up in routine fashion with a red rose stem for a pen and the screaming of six chimpanzees for musical accompaniment. Britten expects to get \$7500 for the season. He started in the amateur clown field in 1950 while teaching English.

Q. Mr. B., how did you happen to take up clowning as a profession?

A. After attending so many dreary meetings of taxpayers associations, P.T.A.'s, and citizens' committees, I felt a desperate urge to bring more joy into the world.

Q. Are all teachers meetings joyless?

A. Oh, I didn't mean the teachers meetings. I have found many of my funniest ideas from the way in which faculty meetings are conducted.

Q. Was it the salary for clowns that attracted you?

A. It helped. It was more than I could expect for teaching, of course, but the clown profession has other advantages. There is no minimum salary law, and there has never been any clown study of merit rating. The salaries are not dependent upon legislators or school boards, either.

Q. How does a clown's job compare with that of school superintendent?

A. There are many similarities. In both jobs you get to see a lot of the country and play to many new audiences. A clown gets his railroad fare, but a school superintendent pays his own moving bills.

Q. Then a clown is better off?

A. Well, he can wear patched clothes without arousing community comment.

Q. Is there a shortage of clowns as well as teachers?

A. Judging from some of the folks who used to heckle me, I think the clown supply is inexhaustible. Sorry, I have to leave now for cafeteria duty—I mean, the monkeys have to be fed.

A SCHOOL board that finds it necessary to issue bonds to obtain funds to pay for school building construction generally finds itself face to face with a number of legal problems. While a number of these grow out of election procedures, which will not be considered here, many others have their origins in the routine of school board procedures. Some of these problems will be considered.

First, it should be recognized that courts are in agreement in holding that the authority to issue bonds is not inherent in the school district. The power to issue bonds, so it is generally held, must be found to have been specifically granted in the statutes.¹ (In a few older cases the courts did recognize the implied authority of school boards to borrow money, but the recent trend appears to be in the opposite direction.) Moreover, it has also been held that the express authority to borrow money does not carry with it the implied authority to issue bonds.² In commenting on the authority of a school district to issue bonds, a federal court has made the following comment: "In every case where a doubt arises as to the right of a municipal corporation to execute negotiable securities the doubt should be resolved against the existence of any such right."³

If the bonds it issues are to be legal, not only must the school board find its authority to issue them in the statute, but it must follow the statutory procedure, if any is outlined, to the letter.⁴ For example, in North Dakota, where the statute provided that bonds "may be made payable in not less than 10 nor more than 20 years," it has been held that bonds made payable 11 days before the 10 year period had expired were not legal.⁵ If, however, the statute is not specific with respect to procedures to be followed, courts are in agreement that boards will be granted broad discretionary authority.

It is in this field, where specific statutes governing the situation are

Legal Limitations on Issuing School Bonds

LEE O. GARBER

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nonexistent, that much litigation is likely to arise. For example, one question that has been raised relates to the timing of the election to approve the bond issue with respect to the other activities incident to the construction of a building. In this connection a Pennsylvania court has held that, in the absence of a statute controlling the matter, a school board may call such an election previous to the time it authorizes the purchase of the site or enters into a contract for the construction of the building.⁶ In Mississippi, it has even been held that the adoption of the plans for the building is not a condition precedent to the issuance of bonds.⁷

TIME OF MARKETING BONDS

Once the voters have approved the bond issue, the question then arises as to whether the bonds must be marketed immediately or whether this may be deferred and, if so, for how long. Frequently the authority to issue bonds is granted previous to the time the money is actually needed. Sometimes boards prefer to wait until the money is needed before actually issuing the bonds, thus avoiding the payment of interest on the money not yet needed.

At other times, boards may wish to sell the bonds immediately to take advantage of a satisfactory interest rate. When such is the case, they generally desire to invest the proceeds in some short-term sound security such as government bonds. If this is the situation, the board must first look to the statute to see if this is permissible. (Some states, it is understood, have

statutes forbidding this.) If there is no statute forbidding it from so doing, a school board probably would have this authority. No court decisions directly in point were found, but, because this would appear to be a discretionary act and because courts are loath to interfere with a school board in the exercise of its discretionary authority, I think that few, if any, courts would declare such action on the part of a school board illegal.

Where the board decides to wait until the money is needed before marketing its bonds, there seems to be no legal reason it cannot do so, again in the absence of a statute governing the matter. In this connection it has been held that a board may wait as long as two, three or four years, before exercising the authority granted it to issue bonds.⁸ In a Kentucky case, in holding that a lapse of three years between the granting of the authority to issue bonds and the exercise of that authority did not indicate an abandonment of the authority, the court said:

"Very often it is to the interest of the board of education or other municipality, as well as the taxpayers, to postpone the sale of bonds, and this may be done provided the board of education is able to provide for efficient carrying on of the schools."⁹

¹City of Dayton v. Board of Education, 257 S.W. (2d) 1021, 201 Ky. 566; Hager v. Board of Education of City of Ashland, 72 S.W. (2d) 475, 254 Ky. 791; Runyon v. Simpson, 110 S.W. (2d) 440, 270 Ky. 645; Young v. Fiscal Court, 227 S.W. 1009, 190 Ky. 609; State ex rel. Sullivan v. School District, 50 P. (2d) 262, 100 Mont. 468; Gregory v. Board of Commissioners of Randolph County, 78 S.E. 301, 162 N.C. 479; Covington v. McInnis, 142 S.E. 650, 144 S.C. 391; Miller v. School District, 39 P. 879, 5 Wyo. 217.

²City of Dayton v. Board of Education, 257 S.W. 1021, 201 Ky. 566.

³Ashuelot National Bank of Keene v. School District, 56 F. 197; Coffin v. Board of Commissioners of Kearney County, 57 F. 137; Merrill v. Monticello, 138 U.S. 673; Folsom v. School Directors, 91 Ill. 402; Hewitt v. Board of Education, 94 Ill. 528; School District v. Robb, 93 P. (2d) 905, 150 Kan. 402.

⁴Ashuelot National Bank of Keene v. School District, 56 F. 197.

⁵Ibid.

⁶Dupont v. Mills, 196 A. 168 (Del.).

⁷People's Bank v. School District, 57 N.W. 787, 3 N.D. 496.

⁸Hoover v. Lake Township School District, 6 Pa. Dist. & Co. 193.

⁹In re Savannah Special Consolidated School District of Pearl River County, 44 So. (2d) 545, 208 Miss. 460.

In one Kentucky case it was held that even an eight-year lapse of time was not so unreasonable as to invalidate the issuance of bonds.¹⁰ In this case the issuance of \$500,000 worth of school improvement bonds was authorized at an election in 1929. The board immediately issued bonds in the amount of \$100,000. In 1934, following litigation,¹¹ the board was permitted to issue bonds in the amount of \$103,000. In 1937, the board again adopted a resolution requesting the board of commissioners of the city to issue \$62,500 worth of bonds. The board refused, on the ground that the eight-year lapse of time between the date when the authority was granted and the date when the bonds were to be issued was so long as to make their issuance illegal. The court held otherwise, however.

How long a lapse of time would justify a holding to the effect that the authority to issue bonds had expired is not known. Courts will examine each case carefully and render their decisions in light of the peculiar circumstances in each.

In this connection it is also interesting to know that in Montana, where the statute required that bonds be issued within a period of 60 days following the date of their approval, the court has held the law to be directory only.¹² In this case a board was delayed in the issuance of bonds by litigation. When the litigation was over and the board attempted to issue the bonds, more than 60 days had elapsed since the date of their approval, yet the court declared the bonds legal.

NOT INVALIDATED

It should also be noted that the issuance of bonds in an amount smaller than that approved by the voters at an election does not invalidate those issued, and neither does it, generally, prevent the issuance of additional bonds later, if the total amount issued is not the amount authorized.¹³

Another problem frequently faced is the legal effect of an election that authorizes the issuance of bonds in an amount in excess of the constitutional or statutory indebtedness limitation. Courts generally agree that

such an election is not necessarily void—that it permits the issuance of bonds only within that limitation and not in excess thereof.¹⁴ They reason that indebtedness occurs only when the bonds are issued, approved and delivered and not at the time they are voted¹⁵—that the question of whether the indebtedness created by the issuance of bonds is in excess of the legal debt limit can await determination until such time as the issuance of the bonds becomes imminent. While this is the general rule, courts will attempt to consider each case on its merits.

REASON AND GOOD FAITH

In this connection, a New York case is in point.¹⁶ In this case the issue was "whether the indebtedness of a school district must be determined . . . at the date of a district meeting at which a proposition is submitted authorizing a board of education to expend money for the construction of a school, or whether the amount of such indebtedness may await determination . . . at the time the bonds are to be actually issued." The court said:

"It was reasonable for the . . . board of education to believe when it passed the bond resolution that the equalized assessed valuation of real property in the district would be sufficient to sustain the bond issue when the time for issuance came. The time lag was and is not unreasonable under the circumstances. We do not commit ourselves however to the theory that a board of education may, in the ordinary course of events, pocket or pigeonhole a majority vote on a proposed bond issue that clearly exceeds the district debt limit and hold the same for years on a mere speculation that some time in the uncertain future

the equalized assessed valuation of the district will be sufficient to support the issue. A rule of reason that demands good faith must be applied, and it would be unwise, if not impossible, to tailor a rule otherwise that would fit every conceivable set of circumstances."

In a Missouri case the court appears to have followed a different rule. There it was held that where the bonds were in excess of the legal indebtedness limit at the time their issuance was approved, the bonds were illegal even if, at the time of issuance, they were not in excess of that limit because of a change in the assessed valuation.¹⁷

Then, too, in Pennsylvania, in a case involving the authority of the city of Philadelphia to issue municipal bonds, it was held that, where the bonds were within the indebtedness limit at the time they were voted, they were legal, although they were issued at a later date, when the assessed values had dropped to such an extent that the indebtedness covered by the bonds exceeded the legal limit.¹⁸ The court reasoned that it was "the assessed valuation of the property at the time of the authorization of the loan which is to be observed, and compliance with the debt limitation thus established being shown, the legal status of the loan is forever fixed." Whether this is an exception to, or an amplification of, the general rule previously stated is not clear. How the Pennsylvania court would have ruled had the conditions been reversed—*i.e.* had the amount approved exceeded the debt limit at the time of the election but, because of increased assessed valuations, had come within that limit at the time the bonds were issued—cannot be known.

LIMIT ON LEGISLATURE

With reference to the indebtedness limit, one thing is clear. The legislature may enact a statute setting that limit below the limit provided for in the constitution,¹⁹ but it cannot pass a statute authorizing a school district to issue bonds in such an amount as would create indebtedness in excess of the constitutional limit.²⁰ #

¹⁷State ex rel. Consolidated District C-4 of Caldwell County v. Holmes, 245 S.W. (2d) 882 (Mo.).

¹⁸Duane v. City of Philadelphia, 135 A. (2d) 401, 322 Pa. 33.

¹⁹Clere v. Ashland Board of Education, 277 S.W. 335, 211 Ky. 130.

²⁰Conner v. Charleston High School District, 4 S.E. (2d) 431, 191 S.C. 412.

¹⁰Runyon v. Simpson, 110 S.W. (2d) 440, 270 Ky. 645.

¹¹Hager v. Board of Education of City of Ashland, 72 S.W. (2d) 475, 254 Ky. 791.

¹²State ex rel. Sullivan v. School District, 50 P. (2d) 252, 100 Mont. 468.

¹³State v. Boring, 164 So. 859 (Fla.); State v. Special Tax School District No. 14 of Dade County, 161 So. 410, 119 Fla. 352; Rogers v. Carlisle Graded School, 13 S.W. 587, 11 Ky. L. 934; Runyon v. Simpson, 110 S.W. (2d) 440, 270 Ky. 645; Surratt v. Board of Education of City of Ashland, 231 S.W. (2d) 88, 313 Ky. 343; Young v. Fiscal Court, 227 S.W. 1009, 190 Ky. 609; State v. Gallatin County High School District, 58 P. (2d) 264, 102 Mont. 356.

¹⁴McKinney v. Cudiz Graded Common School District, 137 S.W. 839, 144 Ky. 85.

¹⁵Hebel v. School District R-1, 279 P. (2d) 673 (Colo.); Gray v. Joint Rural High School District, 286 P. (2d) 147, 178 Kan. 387; Hill v. Board of Education, 143 N.Y.S. (2d) 415; Mistler v. Eye, 231 P. 1045, 107 Okla. 289.

¹⁶Hill v. Board of Education, 143 N.Y.S. (2d) 415.

Grouping Can Be Flexible Within the Classroom

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SEVERAL considerations prompted the Gulf School Research Development Association to restudy the question of classroom grouping in the Houston area of Texas. The findings of earlier research had led to the conclusion that simply separating children into classes according to intelligence test quotients has not resulted in increased achievement for individual children. The slow learners still get low scores on achievement tests while the rapid learners do not score higher as a result of ability grouping, although teachers claim certain social advantages from ability grouping. The teachers assigned rapid learner classes are the most satisfied, since these groups are inclined to show superior results in any case.

A study of professional literature disclosed 24 varieties of grouping practices. Promotion and grade levels represent traditional forms of grouping. The current trend is to maintain a fairly tight correlation of age to grade on the age-grade chart and to look askance on any marked deviation therefrom. The majority of school systems favor annual promotions. Departmentalization usually starts at about the seventh grade level, but promotion by subject areas seldom takes place before the tenth grade. Within this framework it is conceivable that some sort of homogeneous grouping of classes at any age-grade level could be organized, provided there are enough pupils to sectionalize, either for all subjects or for particular subjects.

The complications arising from such an attempt at homogeneous grouping are commonly understood: As soon as children are sectioned on the basis of one characteristic or trait they are found to be entirely heterogeneous in any number of other factors; the range of scores in such classes on the measurable criterion trait violates normal dis-

tribution, and, while the logical sequel should be to gear the instructional materials to the class level on the criterion trait, in practice a complexity of learning factors makes this almost impracticable.

Grouping Within Classes. Consequently, no matter what the administration may have done about assigning children to classes initially, almost all teachers at all levels are found to engage in various types of grouping within their classes. This makes it possible to identify several types of within-class groupings: ability level grouping, talent grouping, differentiated curriculum grouping, tutorial grouping, opportunity grouping, and competitive grouping; or common interest grouping, motivation grouping, committee grouping, and discussion grouping; also social grouping, teamwork grouping, grouping for leadership, grouping for recognition, and socio-dynamics grouping. These informal groupings are frequently organized and reorganized; they arise from necessary purposes and fade when their usefulness passes.

Without going in great detail into administrative problems that evolve from the exigencies of grouping, such as the necessity of assigning transferred pupils, keeping records, giving tests, reporting marks to parents, providing suitably qualified teachers, scheduling and others, we must examine closely what relationship exists between grouping and the learning process and its purposes.

Obviously there are learning experiences which a child can have only in group situations, and these are universally held to be essential to building character, teamwork, leadership, effective and correct human relations, and participation in complex and purposeful group activities. Knowledge and

skill are not enough; it takes wide and diverse experience in the application of knowledge to produce the mature and educated individual. Both purpose and value derive from social ends.

The experienced teacher is especially sensitive to a great power that rests in what is termed "motivation." When Thorndike demonstrated the laws of learning he made it clear that these laws are of unequal force. The drive to learn is of supreme importance, and the teacher knows that of several available ways of motivation the most effective usually is "group purposing." So the teacher is vitally concerned on this score with his grouping arrangements, whether it be a group of the whole or groups within the whole. Incidentally, the parents are also concerned, because they sense that the ideals of their children are influenced by the company they keep. Thus a teacher recognizes that application of knowledge is a function of grouping.

Present Trends in Professional Thinking. By whatever plan of grouping then, whether homogeneous or heterogeneous, structural or operational, formal or informal, there are these present trends of professional thought that are worthy of note:

1. Lest the gifted child be neglected, he should face the challenge of competition with his intellectual peers, and, despite the fact that childish trying this or that only to cast it aside may be quite essential to growing up to adult individualism, he should have the opportunity at least of advancing consistently deeper into the field of his special talent.

2. All children require the growth experience of playing various rôles in many kinds of group situations.

3. In group action the teacher can impart the principles of Americanism and democratic living and provide

TWENTY-FOUR TYPES OF CLASSROOM GROUPING PRACTICES:

1. ABILITY GROUPING WITHIN A CLASS

For the development of a certain skill, the classroom is divided into two or more groups on the basis of inadequacies in that skill. There is no group naming and the class time is given to individual work, small group work, and class discussion. Ability grouping in reading differs slightly in that the groups use basal readers of different levels, and each group is dealt with as a class within itself.

2. ADEQUATE GROUP RECORDS

Records are kept of the progress and growth of each child. Records are of these types: (1) Official records, which are objective. (2) Individual records, which are more personal. (3) Current anecdotal records. (4) Progress charts, which are kept by teacher and children together. These serve as guides to future grouping.

3. COMMITTEES FOR STUDY PROJECTS

For acquisition of knowledge in a lifelike situation, the class outlines the area to be studied, setting up topics to be investigated, projects to be done, and problems to be solved. The class then divides into groups on the basis of desire to engage in a phase of the work or a project. Each individual is responsible to the group, and each group fulfills a particular function for the class, thus introducing social responsibility and teamwork.

4. GROUPING FOR LEADERSHIP

In cooperative group planning, leadership is not considered the exclusive privilege of the teacher or of a few gifted children. The child acts as leader who can contribute most to the group as a whole in a particular project.

5. GROUPING FOR BASIC CITIZENSHIP

Autocratic classroom control tends to produce authoritarian personalities; therefore the teacher's aim is a democratic group situation where all problems of policy are discussed with the children, conditioned to their maturity. The leader (teacher) as fully as possible acts as a regular member of the group. Decisions on what to do, when to do it, and how to do it are made cooperatively.

6. INTEREST GROUPING

For the development and extension of interests, children select their own groups by joining the one working on the project that interests them most or contains persons with whom they want to work. The emotional climate of a classroom has been found to be an important factor in educational behavior.

7. GROUPING GIFTED CHILDREN

(The gifted child is defined as the child with a high level of general intelligence—generally above 120 I.Q.—as measured by traditional tests.) Gifted students work together on special projects but are not permanently separated from the class. They are able to do more intensive research and much wider reading and therefore make valuable contributions to the class goal.

8. INDIVIDUAL SUCCESS THROUGH GROUPING

In order that every child in the class may attain success through grouping, the democratic teacher makes extensive provision for group activities in which each individual contributes his part and can succeed. The teacher helps students define a problem and then sees that each one works on that part of the problem which he can handle most successfully. To do this a teacher must know his students' abilities, handicaps, strengths and weaknesses, both social and academic.

9. GROUPING FOR MOTIVATION

Under the guidance of the teacher, the children set up a common goal and all activities lead to the achievement of that goal. Since the children see the purpose of what they are doing, motivation is strong, and they are anxious to acquire understandings and skills necessary to achieve their goal.

10. REGROUPING FOR DEVELOPMENT

Many times during the year it is necessary to rethink the grouping of children, which is done not so much on the basis of standard scholastic achievement but on the basis of a child's ability to live and work successfully with the group.

11. GROUPING FOR SOCIAL GUIDANCE

For guidance in social relationships, studying a child's status and participation as a group member by use of sociogram and anecdotal records has been found helpful. For the older child, self-evaluation of action with a group, such as may be recorded by wire, tape and disk recording machines, plus good guidance instruction, has brought about more desirable social behavior.

12. SOCIOMETRIC GROUPING

To fulfill social needs and discover children who are unhappy, rejected and ignored, a teacher uses a sociogram. A follow-up is made every two or three months to detect changes that have come about. The sociogram often reveals group structure, subgroups, leaders and isolates.

ever so many opportunities for children to plan, organize, administer, mature in responsibility, and find efficient ways to coordinate their activity.

4. Grouping is at its very best when it bears directly toward a timely teaching goal, and for many teaching situations group learning is more efficient.

5. The mixture of abilities, skills, backgrounds, traits and interests of an ordinary class is a great challenge to the teacher. With a mixed class the teacher

cannot rely on last year's lesson plans or expect stereotyped responses; he must design many strategies to bring about natural evolution of group learning and have complete satisfaction in the results.

Score Card Developed. A study commission of the research association on provisions for individual differences and basis for grouping, under direction of Evelyn Thompson, professor of education at the University of Houston, sought (1) to clarify the educational basis for grouping and

(2) to determine the characteristics in pupils to be considered as a basis for grouping. The outcome of their study was a "Grouping Practices Score Card" which has been tested and proved a sensitive criterion instrument.

The instrument (reproduced here) is experimental and its results have not yet been correlated with class size, grade levels, teacher's experience, curriculum policies, time allotments, or school policies, but it is thought that an item analysis of the score card

AN EXPERIMENTAL SCORE CARD DEVELOPED FOR TEACHERS' USE

13. GROUPING FOR SPECIAL TALENTS

(Talent here is taken to mean special abilities which are not necessarily associated with a high intelligence quotient.) Children with special talents are made to feel they belong to a group and that they have something to contribute if they do art work, music work, dramatization, creative writing, handicraft, administrative planning, or whatever the field of their special talent. Their product is brought before the class for enjoyment and enrichment.

14. TEAM GROUPING

Two children of similar ability in a particular field work as a team and check each other's work, either written or oral. This is not a substitute for direct teacher observance, which is vital if a teacher is to know the causes of the weaknesses and differences of the children.

15. REPORTING TO PARENTS

The elementary school teacher, after careful preparation is made, sits down with parents of each child once or twice a year (oftener if the need arises) and discusses his achievements and needs, growth and status, using a record folder. The conference type of reporting is a mutual exchange of information between teacher and parent, and enables a teacher to know a child better. In the secondary school, provision is made to bring parent and teacher together by use of "Open House" and "Parents' Night."

16. PROMOTION AS A TYPE OF GROUPING

Since research has proved failure and retardation do not stimulate effort but on the contrary discourage it, a child is not promoted at arbitrary intervals on arbitrary standards. He makes continuous progress, rapid or slow, depending on the whole child. This implies a planned learning situation into which he is promoted.

17. TERMINATION OF GROUPING

Time allotment for group activity depends on the purpose of grouping. It should cease when interest wanes, need is fulfilled, or skill is mastered. Each child daily works with several different groups; they are flexible and temporary.

18. DIFFERENTIATED CURRICULUM IN GROUPING

The subject matter related to a given unit of work will differ for children at various stages of individual development, as will the skills used and the understandings expected, but the work of the class is correlated in the unit. In the secondary schools, however, individual differences are provided for by use of elective classes either in different areas or in a subject.

19. ASSIGNING TRANSFER PUPILS

The transfer pupil without sufficient records is placed in the smallest class of his chronological age available where the teacher and pupils can make him feel welcome and at ease. With this emotional climate established, the teacher observes the pupil and groups him experimentally until she comes to know him. On the basis of objective evidence, he may be reassigned to the class where he will be successful and well adjusted.

20. "BUZZ" GROUPING

"Buzz" groups are short-run groups which encourage full participation of everyone in a classroom. This is particularly suited to high school age students. It is informal and easy to conduct. Membership is determined by numbering off or designating corners of the room; only a few minutes of time is allotted (approximately 20 minutes) unless agenda have been drawn up; a chairman and a reporter, often a volunteer, are chosen quickly and informally. Class opinion or feeling is thus obtained whereas only a few students may express themselves in full class discussion.

21. TUTORIAL GROUPING

A rapid learner is paired off with a slow learner for practice in the skill of a particular field (often arithmetic or spelling in lower grades). It can be done with a rapid learner and several slow learners if the children are mature enough to take responsibility.

22. MEASURING PROGRESS WITHIN GROUPS

In the basic reading (other skills may be substituted) program, the grouping is according to reading abilities. Each group will use reading tests suitable for its level of work or development. Testing is done for the goals of that particular group.

23. DISCUSSION GROUPS

Informal face-to-face grouping, with much conversation, encourages children to be alert, inquiring and able to express themselves effectively.

24. OPPORTUNITY CLASS GROUPS

In larger schools, the administration forms classes for special needs such as arithmetic weaknesses or language handicaps. As these problems are taken care of, the children are placed in other classes where they have an opportunity to be successful. In smaller schools, a special teacher works with children having such problems for about an hour a day until they gain skill and confidence.

could be a useful resource for inservice improvement. When applied in five school systems to 65 individual classroom teachers at several grade levels, it was found that the incidence of grouping practices among teachers ranged from 23 to 3 of the practices, with a median of 16. In other words the median teacher had employed 16 different types of grouping in her classroom during the previous three months. All but four of the 24 grouping practices had been used by more than half the teachers.

When the score card is administered, a separate rating is prepared for each classroom by the teacher or by an interviewer. Full credit is allowed if an equivalent or better practice is recorded in any of the 24 categories for which model grouping practices are described. A cumulative score is obtained for each classroom, and it is possible to take the average of these classroom scores as a school's average score. In the pilot study it was found that the average scores of the schools ranged from an incidence of 20 to 10

practices, with a median school average score of 14.

The philosophy of the instrument is not based on a theory of homogeneous grouping or of heterogeneous grouping but on flexibility in grouping. The intrinsic values of each child experiencing in school each day several different rôles in various types of group work is the essential motif. Thoughtfully studied, the instrument composes for the school a picture of its group processes, showing areas of strength and weakness. #

OPINION POLL

How should the public schools celebrate holidays—or should they?

Superintendents disagree on the answer

A nationwide sampling of superintendents' opinions by The Nation's Schools

WHICH holidays does your school celebrate—and how? First of all, superintendents (84 per cent) agreed, it is all right to hold Christmas celebrations in the public schools. But when it comes to non-Christian holidays, only 44 per cent think any kind of in-school observance would be appropriate.

This discrepancy provokes a variety of questions which are reflected in the answers to this month's opinion poll—questions about separation of church and state, a Christian heritage, understanding, freedom and democracy.

At one end of the continuum is the Montana administrator who says flatly, "I feel that America was born on the premise that we are Christians. Anyone who does not wish to be one

made a mistake by coming to America." Needless to say, this gentleman finds no place in the schools for observing the significance of non-Christian religious holidays.

With a similar veto, two other respondents explained: "Our country has a Christian heritage. Those who come here should be willing to accept the teaching of Jesus as part of our background." "While we have religious freedom in this country it is a Christian nation, and I see no reason why the schools should participate in other observances. This does not imply that there should be a lack of respect for the faiths of others."

On the other hand, some believed that recognition of any religious holidays has no place in the public schools.

"This doesn't mean that I am intolerant of religious observances," explains one schoolman. "But I feel that if special consideration is given to two religious faiths all others should be given equal consideration and if that were done there would be too many interruptions."

A Texan puts it this way: "Christian holidays are for Christians; non-Christian holidays for non-Christians. But for the schools to observe either when both are present is questionable. If both groups are numerous enough in a school system, dismiss school so that each can observe in his own way."

Rather than a black and white answer, the largest number of comments fell into an "it depends" category. These administrators would tailor their solutions to the individual school or community.

Many would provide for minority faith observances only when pupils of that faith were enrolled. In some cases, there would have to be a large percentage of such students to justify this practice. However, a Kansan, sensitive to the minority rôle, would make such allowance where "at least one pupil would be directly concerned." Said a New York superintendent, "I feel a great deal depends upon the community. The school should reflect as much as possible the ideas and feelings of the community—if you can find out what they are!!!"

Some would observe the significance of the holidays of all groups, but "local conditions should determine emphasis that may be permitted," in the words of a southern administrator.

RESPECT THY NEIGHBOR

But the composition of the school or community was not the issue in the minds of others. "I have no acquaintance with the Jewish religion," says a Nebraskan. "I believe a knowledge of the significance of their holidays would lead to a better understanding of the people." And a Minnesota administrator adds: "Let us respect the religion of our neighbors. A little observance of their religions is healthy for our country."

In the same vein, a Californian writes: "An examination of the basic tenets of all the major religions would be in order for special religious holidays in all schools—public, parochial and private." Another administrator adds: "We believe that it should be possible—as do our Jewish friends—to celebrate Christmas, Hannukah, etc.,

OBSERVANCE OF HOLIDAYS

1. Public schools traditionally are dismissed for the observance of the Christian holidays of Christmas and Good Friday. Should any observance of these religious events be permitted in public schools?

Yes:.....84% No:.....13% No opinion:.....3%

2. Should Jewish pupils or pupils of other non-Christian faiths be excused from public school for observance of their major religious holidays?

Yes:.....85% No:.....13% No opinion:.....2%

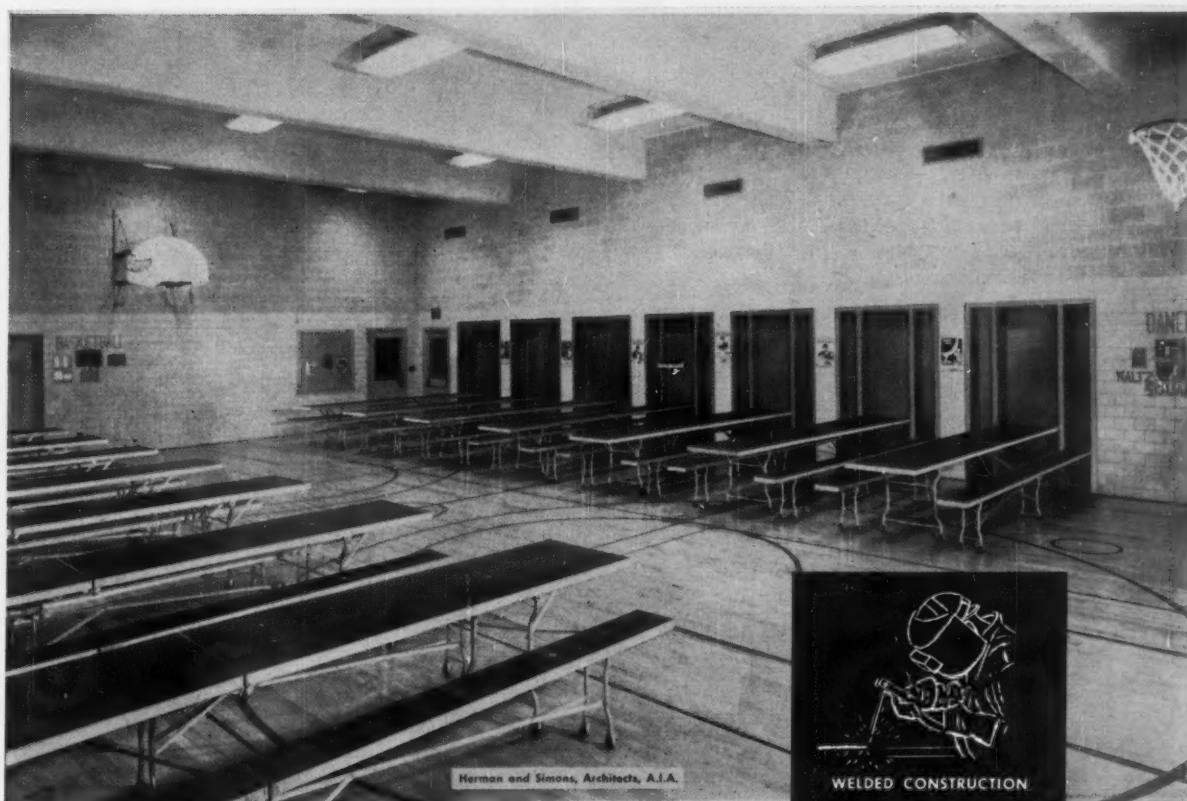
3. Should public schools observe the significance of religious holidays of Jewish or other non-Christian faiths?

Yes:.....44% No:.....50% No opinion:.....6%

4. Some public school systems have followed the practice of observing state or national holidays in school programs or activities rather than by dismissing school. Please check the holidays you would prefer to see celebrated in school rather than by dismissal:

Lincoln's Birthday:.....86%	Veterans' Day:.....71%
Washington's Birthday: 85%	Memorial Day:.....43%
Flag Day:.....79%	Labor Day:.....30%
U.N. Day:.....72%	

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in an objective way, capitalizing on this experience to teach children about the several beliefs without getting too emotional about it all."

"Religious freedom must be a tenet of democracy," states an Oregonian. "If religious freedom is to be a tenet of our life we must observe equally the major religious days where practical. This does not include sectarian observances and must be done without religious meddling in the schools or the involvement of religion and state."

And freedom implies responsibility. This is the conviction of a New Eng-

lander who asserts: "I feel we are not teaching tolerance if we simply ignore significant minority groups in our population." He suggests informative assembly programs showing the significance of all holidays. With the same idea, a Michigan man sees the holidays as an excellent opportunity to develop understanding and tolerance through appropriate discussions, instruction and assemblies.

Others underlined the educational responsibility involved. "Schools have a responsibility to teach religions of the world, and their contributions to

our way of life." "Education cannot avoid teaching the backgrounds and significance of man's deepest convictions. As part of their general social education, children should be given information on all the social and religious customs of the various groups represented in the school."

SHOULD STUDY ABOUT HOLIDAYS

Another sizable group believed that religious holidays should be observed from an historical and comparative point of view and that such study should be included in the school curriculum, preferably in social science.

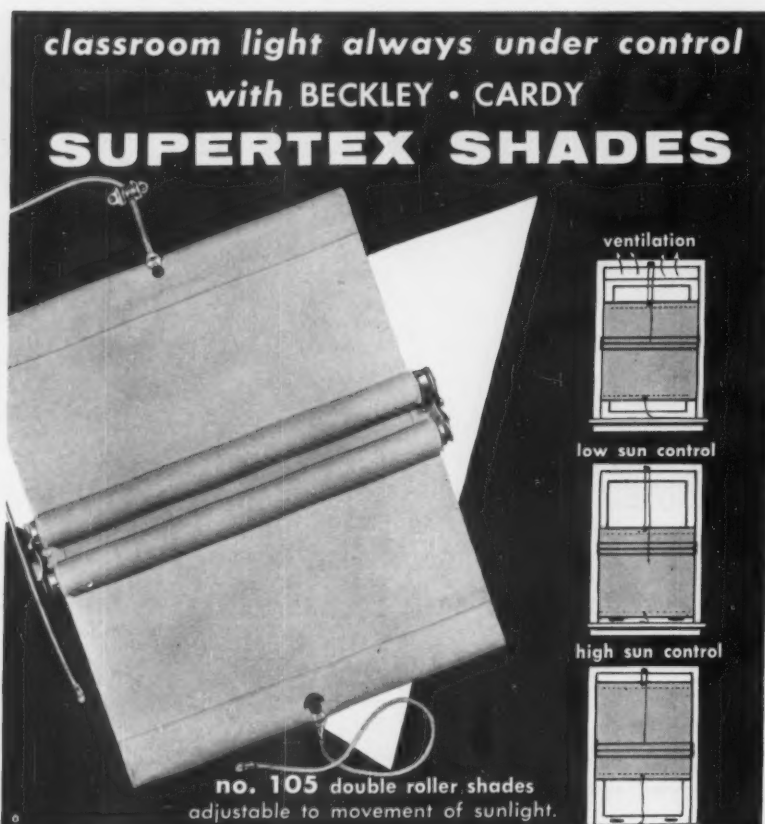
When it comes to excusing non-Christian pupils for the observance of their religious holidays, most administrators (85 per cent) believe this is acceptable practice. The qualifications were few: Some emphasized that this meant *major* holidays only. The days should not exceed two a year, said a Missourian, and an Indiana superintendent suggested that the days absent should not exceed the regular vacation. But a Kansan said: "Would not favor closing school for any holidays."

Washington's and Lincoln's birthdays won the popularity poll for national holidays preferably celebrated in school, with 85 and 86 per cent, respectively. Flag Day (79 per cent), U.N. Day (72 per cent) and Veterans' Day (71 per cent) offered the closest competition.

The percentages indicated that most respondents believed in-school observance was a good thing. These comments bore out the figures: "Feel we have too many holidays. We are cheating the 'kids' when we dismiss school." "The length of our school day and school year remains constant; yet during the past quarter century we have added greatly to our curriculum. Fewer holidays would help us do a better job." One administrator objected to "too much time for Christmas holidays. One or two would suffice."

"Very few Americans give more than a passing thought to the true meaning of our holidays. They are merely a means to break our routine living schedule and to commercialize where possible," says one respondent who favors in-school observance of all holidays except the "big three." And a Californian further explains this position: "We can do a much better job of observing the holidays listed [in Question 4] by special programs at school rather than by dismissing students for a day." #

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Business Manager, Public Schools, New Orleans

STAFFING the organization is the third of the technical problems of the business manager. Last month's article discussed the first two problems: planning and organizing.

The structure itself will not accomplish any work; results depend on the efforts of the people who are assigned to positions within the structure. Hence, staffing becomes a major consideration.

The opportunity to select key personnel on his immediate staff comes only occasionally in the life of the business manager. Usually when he comes on the job, the positions are all filled and the organization is operating. Yet when he does have the chance to appoint an immediate subordinate, he must give careful attention to the

effect of the appointment on his staff as a whole.

First, of course, he must attempt to obtain technical competence. The person appointed must have the necessary skills to carry out his specific duties. More than that, he must be able to fit into the group in such a way that the coordinated program of activities is not disrupted. The empire-builder or the shirker will create problems that will affect not only the work of his department but also the work of all the other departments with which he necessarily comes in contact. No man is an island in this work; his personality and his attitudes toward his associates are as important as his technical abilities.

Yet how often a business manager will spend months studying the advisability of purchasing a particular piece of office machinery and then hire a department head on the basis of a written application, which may deliberately overstate the applicant's qualifications, and a half-hour interview, which may consist of a discussion of superficialities. While we all pride ourselves on being infallible judges of human nature, perhaps we should depend less upon our subjective judgment and more on objective analysis.

Psychological tests should be used. Pertinent information about the applicant's experiences in other positions should be searched out, particularly with reference to his relationships

Sometimes the business manager has both feet firmly on the ground . . . and sometimes he doesn't.



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with fellow workers and supervisors. His characteristics should be carefully analyzed in light of the personalities of the other supervisors with whom he must work. His techniques of supervision should be analyzed in light of the beliefs of the organization's top management.

If the appointee is coming into the organization for the first time, the business manager has the problem of how to introduce him to the staff so that he will be accepted more readily. There will be a tendency on the part of some employees to feel that

they were passed over for promotion, so that their attitude may be one of resentment expressed through active complaint or lack of cooperation.

If he is promoted from the ranks, he may need help in adjusting from a performing to a supervising position. The saying is common in industry that an excellent worker sometimes makes a poor foreman. The same is true in school administration, and it is the responsibility of the business manager to assure that the transition is made smoothly and effectively with minimum friction. These problems are par-

ticularly difficult if the appointee is promoted over men who are his seniors either in length of service or in organizational status.

In making staff assignments, the business manager must keep an eye on the future so as to assure, insofar as possible, that there are potential department heads coming up through the ranks. The structure of the organization and the staffing plan should provide a clear picture of anticipated future vacancies at the top levels and a clear path of promotion for those subordinates who are capable of advancement. They should be steered away from dead-end jobs and encouraged to prepare themselves for promotion by increasing their qualifications. Whenever possible, they should be assigned to increasingly difficult lead or supervisory positions to gain the experience in actual administration they will need. Their progress and development should be carefully watched and analyzed, and assistance should be given them in overcoming blind spots or weaknesses, either in technical competence or in personality development. This requires a fine touch and is much easier to talk about than to do.

The business manager must also be concerned about the balance of his immediate staff. His department heads preferably should complement one another in ages, interests, experiences and attitudes. The new, young appointee, eager to make a name for himself by showing great initiative and a fine disregard for the traditional ways of doing things, should be counterbalanced by the old hand who has been through the mill and who knows the organization and its background in great detail. New blood must be offset by respect for the organization's traditions of institutional development.

The business manager must recognize that his organization is based on expectations for the future. It will last much longer than his brief span, and his staff should be selected with the long-term results in mind. For example, he may wish he could surround himself with men of approximately his own age and with similar backgrounds. However much this might contribute to group unity during his tenure, it might spell disaster if all the top level supervisors reach retirement age at about the same time. Replacement of the membership of the group in a



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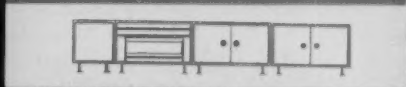
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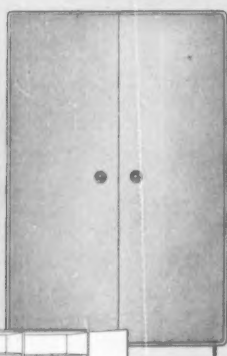
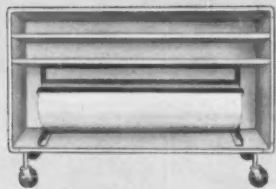
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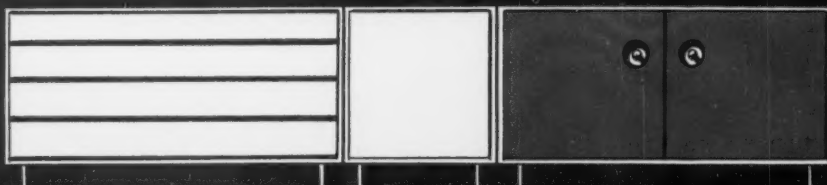
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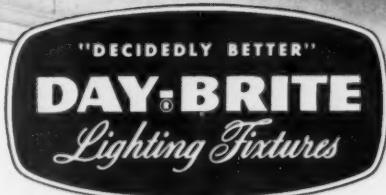


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short time span would seriously disrupt the continuity of the organization. Furthermore, such unity might not provide the diversified interests and attitudes which help to assure that group decisions will be realistic.

* * *

THE fourth function is that of *directing*, which here is used in a broad sense to include coordinating and controlling activities. Perhaps a better description is that of "getting the work done." For the whole purpose of planning, organizing and staff-

ing is to enable the work to go forward so that the goals which have been set can be attained.

In order to get the program of activities under way, each individual should understand clearly where he fits in the organizational structure and what his duties are. This requires a clear delegation of authority to enable him to act without a constant stream of specific instructions. Responsibility for action requires authority which is coequal, and authority must be delegated down the line from each supervisory level to the next until the work-

ers on the job receive their directions of what to do and when to do it.

Delegation of authority may be said to have two effects. One is to enable subordinates to act; the other is to clarify the line through which difficult problems should be referred upward for settlement. This is not a new concept, for Moses "chose able men out of all Israel and made them heads over the people, rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens. And they judged the people at all seasons; the hard cases they brought to Moses, but every small matter they judged themselves."



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The meaning of authority frequently is misunderstood. Some supervisors, because of a natural repugnance to the idea of being known as a petty tyrant, hesitate to exercise authority, while others get exaggerated opinions of their powers and satisfy their egos by throwing their weight around. A business manager is entrusted, by reason of his position, with certain authority to carry forward the work of his division. On some occasions he necessarily must make up his mind what is to be done and issue instructions to his staff. Depending upon circumstances and his own personality, such instructions may be in the form of "do it or else" directives or in the form of suggestions. It is still his responsibility, however, to see to it that the work gets done, and his superiors are reluctant to accept excuses, however carefully worded, for failure to obtain results.

Much has been written about democratic administration and consultative supervision, and they are undoubtedly effective techniques for establishing work programs and obtaining cooperation. But it is difficult for a committee to exercise leadership or to accept responsibility for errors in judgment or action. If an administrator relies heavily on group decisions in solving operating problems and finds that such decisions are frequently at variance with his own independent judgment, he certainly should be alert to the fact that either the group is making errors or he is. Either way, corrective action is indicated.

It is in the process of directing that the administrator must exercise leadership. The problems of what constitutes a leader and how he gets that way have attracted the attention of psychologists, political scientists, and students of administration. While few specific



Ralph Heath
SUPERINTENDENT OF SCHOOLS
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data about leadership are really conclusive, several opinions stand out as being significant: First, leadership is based on the consent and acceptance of the group in which it is exercised. A person cannot be appointed a leader; he must earn the position by his own actions in the situations confronted by the group. Second, leaders can be developed. Occasionally one is born, but usually they are made by their skill in handling administrative problems. This skill, like others, can be learned. Third, there is a variety of techniques available for exercising leadership, and at least a part of the success of a leader depends upon his ability to select and utilize these techniques to optimum advantage.

The results of effective leadership include not only orderly progress in accomplishing the purposes of the organization but also a strengthening of group loyalty and esprit de corps, for it is primarily by this means that each individual comes to identify himself with the group and to accept the group's objectives as the means of achieving his own individual and departmental objectives. The leader must

be able to provide the methods by which group aspirations can be identified and formulated as group goals. At this point, there is a strong interrelation with the planning function.

* * *

THE fifth major function of the business manager is that of *evaluating*. Essentially this is the problem of trying to determine how well the established objectives of the organization are being achieved. It involves reaching judgments about organizational structure, personnel, processes, physical facilities, and the objectives themselves.

If specific objectives have been clearly defined and if a time schedule for attaining them has been established, it is a relatively simple matter to ascertain the degree of accomplishment. But determining the reasons for failure may be extremely complex. Detailed analysis will be needed to reach a decision as to whether the fault lies in unwieldy organization, poor definition of duties and responsibilities, insufficient delegation of authority, lack of technical skill on the part of the staff, inadequate staff, cumbersome pro-

cedures, faulty decisions, unwillingness of some staff members to perform their assigned duties, or a combination of two or more such reasons. Definition of the source of failure will not necessarily indicate the solution. Much hard thinking may be, and usually is, required, along with rigorous self-examination. These are difficult tasks, especially if they lead to a logical conclusion that the fault lies with the business manager himself.

It goes almost without saying that evaluation must be based as much as possible on impersonal, objective factors.

In evaluating his staff, the business manager should rely on a broad overview, recognizing that perfect performance is virtually impossible and that each of us has his own peculiarities.

The occasional complaint from teachers, principals or other members of the staff about the work of an individual should be accepted for what it is—a reminder that it is impossible to please all the people all the time and that such a complaint should be investigated in its context. But a constant stream of dissatisfied comments is something else and perhaps indicates the individual's inability to carry on those phases of his work which involve directly the interests of others in the organization. A school system is a group activity, and the reactions of other members of the group to an individual member are one measure of how well he is performing his rôle in the group. Consideration might well be given to a formalized technique for collecting and analyzing those attitudes and reactions on a widespread basis.

Regular reports, both written and oral, also provide the business manager with information about the performance of his organization. Such reports may include statistical analyses, but to be most useful they should provide comparative data showing the relation of present activities to those in the past, a description of problems settled, and a definition of problems yet to be resolved.

The budget and work schedules are also useful in evaluating individual performances. The business manager can use them to determine whether department heads have kept within the prescribed financial limits, whether funds have been spent for the purposes for which they were appropriated, and

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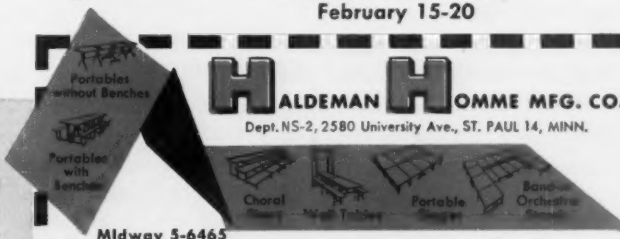
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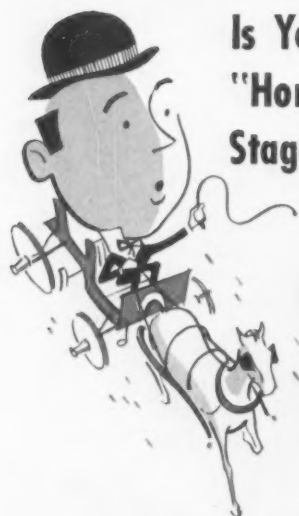
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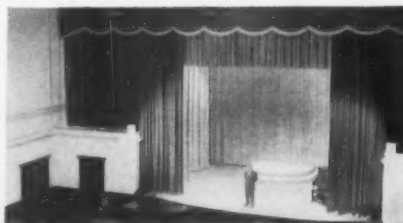
The surface of Dura-Decor Stage Curtains, though "soft" and fabric-

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The Dura-Decor "family of fabrics" now available in more colors than ever. Two weights of embossed patterns, two weights of plain or flat finish: same color on both sides and duplex style—rich color on front, neutral color on back for a smart "lined" look.

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whether work scheduled to be done has all been accomplished.

Evaluation of procedures and processes is more difficult but should be undertaken periodically to determine where the flow of paper work needs further study and corrective action. Are we keeping all the records we need but only those actually needed? Are we requiring too many or too few authorizations or approvals? Can red tape be eliminated? Can emergency problems receive immediate attention? Has slavish devotion to procedure obscured the results which the procedure was intended to expedite?

The problems of evaluating physical plant activities are still more difficult of solution. Are new buildings effective as schoolhouses? Are they economical to maintain and operate? Did we get our money's worth? These are questions to which little attention apparently has been given. Many studies have been made and many suggestions offered to obtain economy in construction, but virtually all of the literature pertains to planning such facilities and almost none to the problem of evaluating the resulting schoolhouse to determine whether the planning concepts have been valid or whether they have been realized.

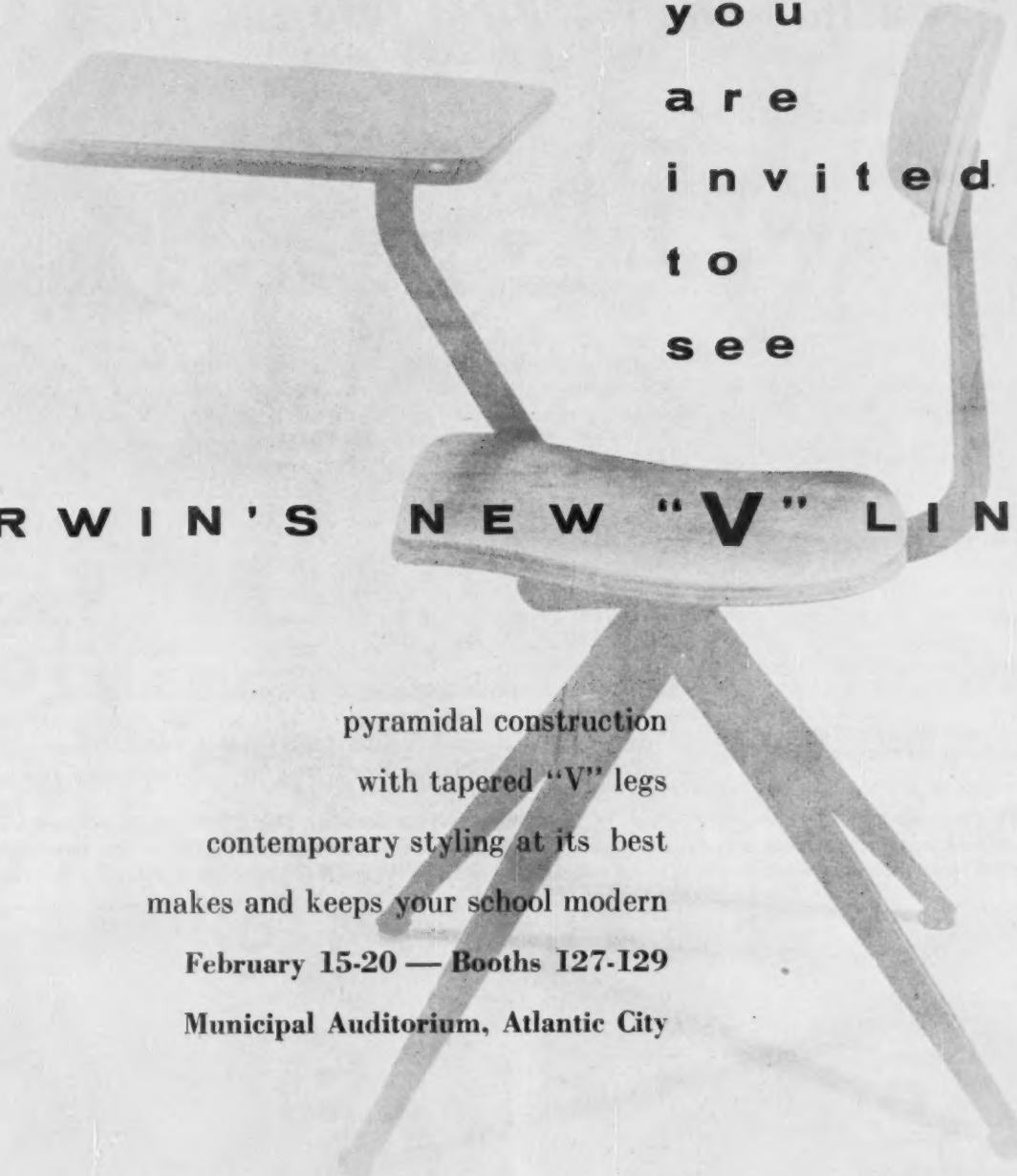
The same is true of maintenance activities. Little has been published to show comparative costs of doing maintenance work with the system's own staff against having as much as possible done by independent contractors. What criteria can be used to evaluate the work of a maintenance staff?

Similar problems arise in all phases of school business administration, and research leading to the establishment of criteria and the development of techniques of evaluation is badly needed to aid business managers in the effective performance of their duties.

The process of evaluating performance leads inevitably to a reconsideration of objectives and how to attain them, and thus we have gone full circle and have returned to planning.

These five administrative functions—planning, organizing, staffing, directing and evaluating—pose the fundamental technical problems of school business administration. Business management cannot be considered a profession until persons active in the field develop administrative principles and techniques that will lead to a professional approach to their problems. #

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Putting Light Control Into the Plans

WALTER A. WITTICH

Director, Bureau of Audio-Visual Instruction, University of Wisconsin

THE growth which has occurred in the field of audio-visual materials and their use in the classroom is almost fantastic. The eight-year trend reported by the N.E.A. Research Division¹ reveals:

1. A 300 per cent increase in the number of filmstrips being used in classrooms.

2. A 200 per cent increase in sound film use.

3. A 100 per cent increase in the use of recordings.

4. Equipment increases: slide and filmstrip projectors, 200 per cent; sound projectors, 40 per cent.

Since these materials are used in classrooms, tens of thousands of rooms in older buildings are currently being

equipped with light-control hardware and shades, blinds or draperies which will allow projected audio-visual materials to be viewed adequately. Those who are responsible for planning *new buildings* should be considering how best to provide for the use of projected learning materials in *all* classrooms.

This article reports current planning and practices.

• • •

I CAN remember when audio-visual education was 'a new idea!' It is no longer that. It is something which is helping us do the job better in most fields of curriculum activity."

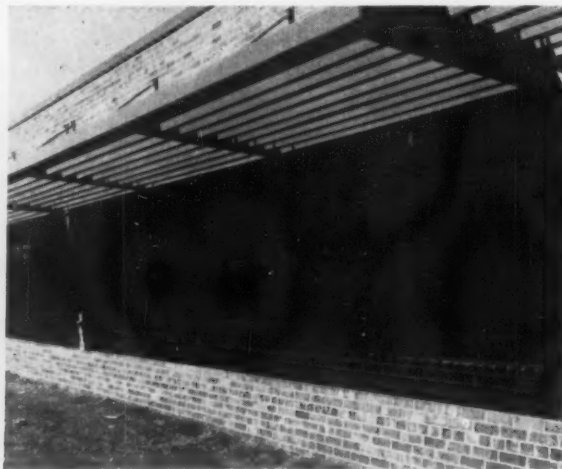
These were the first words C. M. Schmitthausler, principal of the McMorro School, Clayton, Mo.—one of the cooperating schools of the St. Louis County Audio-Visual Association

—said at the meeting of teachers who were working out the means of converting their classrooms to the more effective use of projected materials.

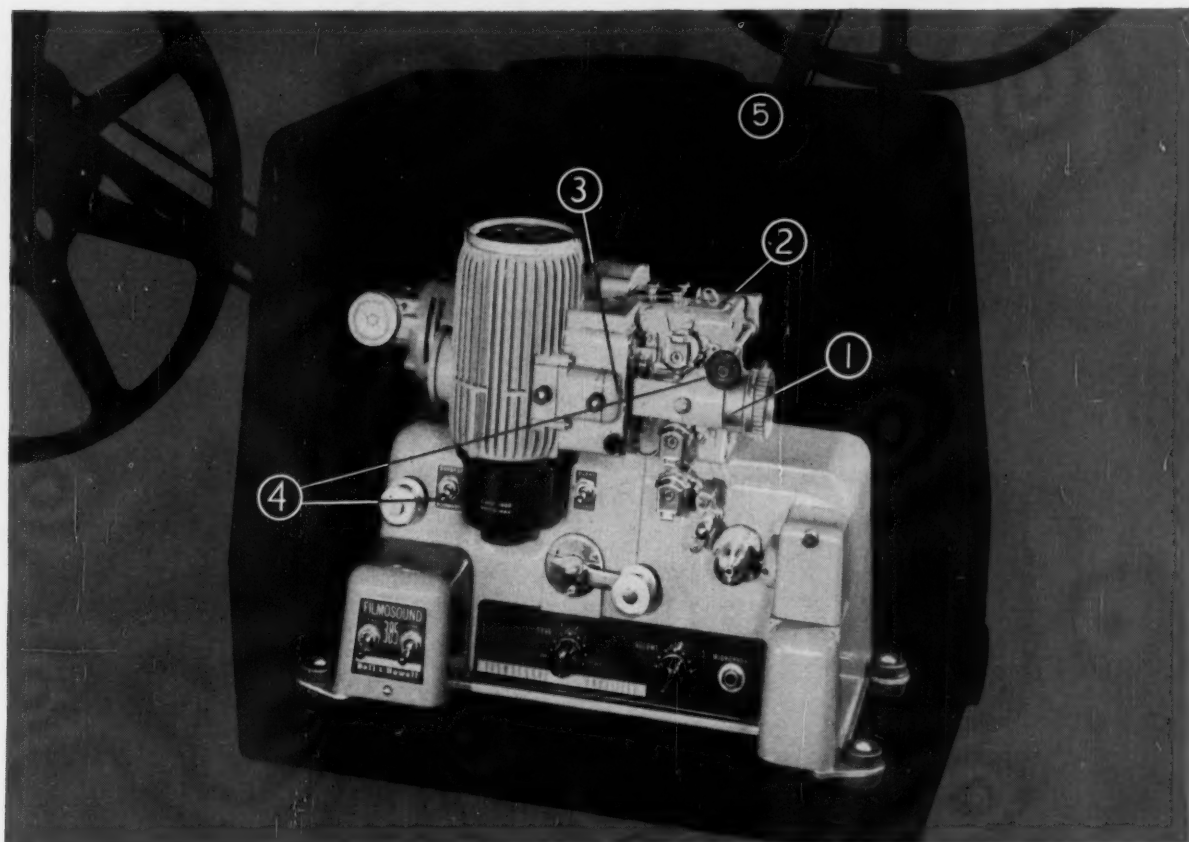
The McMorro School represents a school in transition. Over the last five years, and with considerable investment, 16mm sound projectors, filmstrip projectors, and other equipment have been added for use in the McMorro classrooms. The schools of St. Louis County had in the meantime developed an unusually fine cooperative film library. Recently, however, teachers in the school had been concerned about the fact that their classrooms were not so arranged as to allow them to carry on needed day-to-day experiences with audio-visual materials. They had experimented with new types of screens. These worked fairly well on cloudy days but were

Left: This classroom in the John Hancock School, St. Paul, illustrates how manufactured light provides adequate light level in the room. Four-foot windows give a visual associa-

tion with the outdoors, plus a light-control problem which is easily and economically solved. Right: This exterior view of a school shows the vision-strip and exterior overhang.



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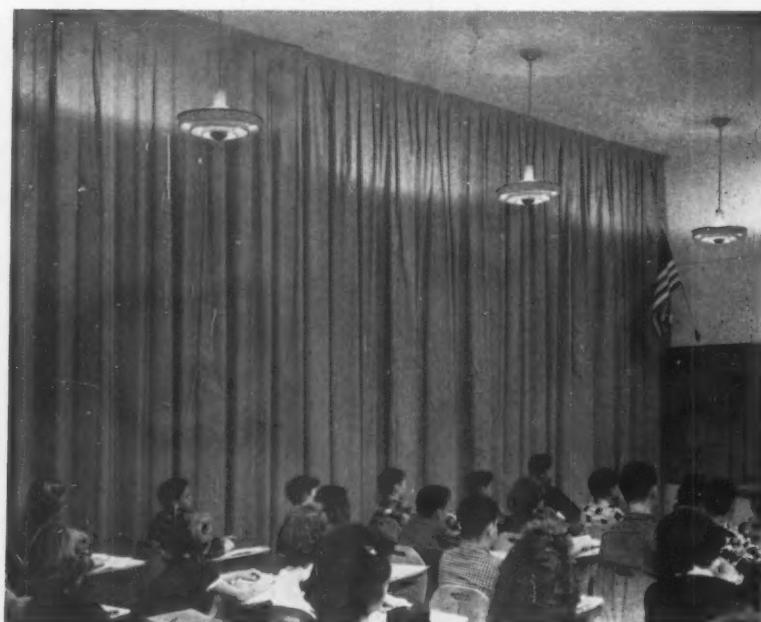
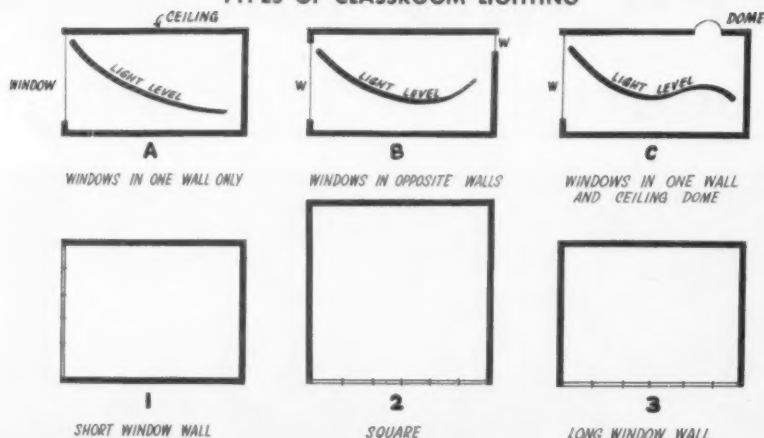
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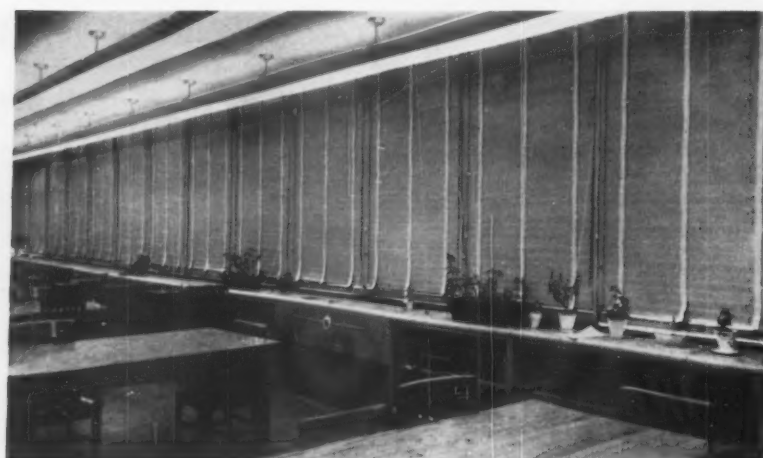
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TYPES OF CLASSROOM LIGHTING



Above: Light control is no problem here, despite floor-to-ceiling exterior glass walls. Smooth-running hardware permits easy manipulation of the large fireproof, light-weight opaque draperies. Below: Venetian blinds, available in steel, aluminum or wood, also may be used for light control.



virtually useless when full sunlight diffused through the sunshades of rooms—particularly those with southern exposures. More investigating revealed that the individual classroom should be equipped to make it possible for light to be reduced to the level of 1 foot candle. At this 1 foot candle level the opaque projector, for example, will produce an image which is sufficiently detailed as to be understandable.

Other teachers reported their recommendations until finally, at the current meeting, this list of requirements for the use of projected materials in the classroom was arrived at:

The teacher must be able to control the light in the room conveniently and surely so as to remove all but 1 foot candle.

A low level of light should remain so as to allow pupil and teacher to see one another's reactions—to "preserve rapport."

Light control equipment must remove ambient light—light which falls on the screen and interferes with the image being studied. Stray light from window shades that flap, from pinholes, or from cracks often destroys the clarity of the image on the screen.

The materials used in shutting out unwanted light should be beautiful as well as serviceable and should be chosen to harmonize with the interior decor of the classroom.

The hardware and installation should be as trouble-free as possible and durable so as to eliminate needless maintenance expense.

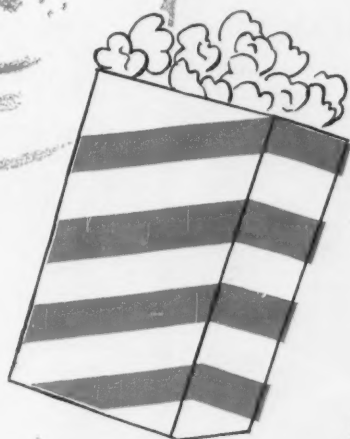
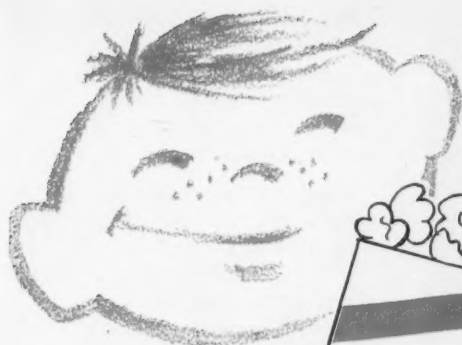
Light-control materials should be fireproof.

As the meeting continued, various commercial representatives were invited to display room-darkening hardware, drapery materials, roller shade fabrics, and venetian and interlocking types of wood and metal blinds.

As the committee continued its search, it discovered that today light-control materials have been designed for almost every type of window as follows:

For the punch-out window. Light-proof roller shades within the window frame, interlocking wood, steel or aluminum venetian blinds, any of which may be mounted within the window frame, or pull-over draperies are all successfully used.

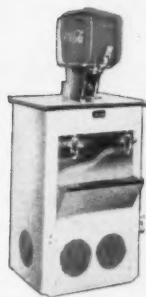
(Continued on Page 110)



puts your school closer to buying the things students want and need

Schools All Over America Are Using Manley Equipment to Make Money with which to buy . . . **BAND UNIFORMS — ATHLETIC EQUIPMENT — VISUAL AID EQUIPMENT** and many other things they need.

The Manley Ice-O-Bar soft drink machine and the Vista-Pop popcorn machine are proven "fund raisers." Wherever students and crowds gather is a good place to have these units to sell and serve popcorn and soft drinks. Students gladly volunteer to operate the machines, and after a few minutes of instruction become expert operators. The equipment quickly pays for itself and begins earning extra funds for your school. Other schools have done it (names on request). Why not your school?



Manley Ice-O-Bar Soft Drink Machine

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- ☐ Please send me more information on the Vista-Pop and the Ice-O-Bar.
- ☐ Please send me the names and addresses of schools that have installed and operate Manley equipment.
- ☐ Have the Manley man call to explain the details. No obligation, of course.

Name

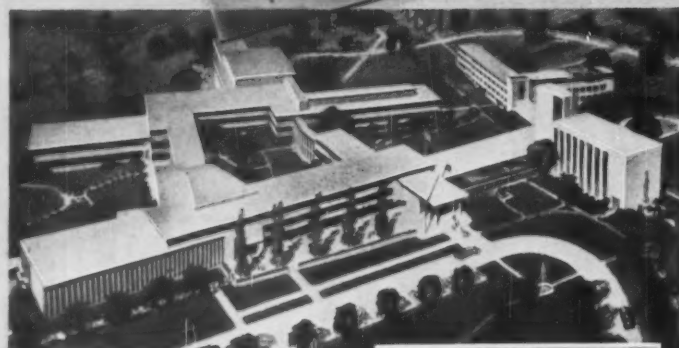
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School

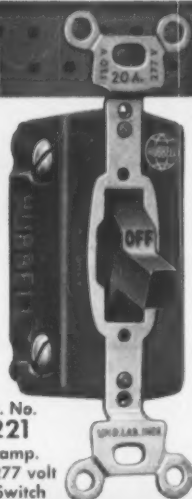
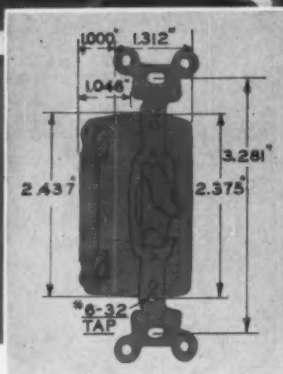
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IT PAYS TO HAVE GOOD CONNECTIONS



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20 amp.
120-277 volt
AC Switch

Dependable AC switch control is of vital importance in any fluorescent lighting installation where high levels of illumination require a large number of fixtures operated at full rated capacity. As in the beautiful school plant above, Topper AC quiet action switches are the ideal choice because they are designed to control many more fixtures than conventional switches, thus permitting control of *more fixtures with each switch*. Operation of heavier circuits (and fewer of them) results in lower wiring costs. Remember, too, that Topper switches are shallower, take up less room and are easier to install.

Detailed information on request

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**FACTORY WAREHOUSE
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Window walls from 5 to 9 feet in height, in combinations of clear glass and glass brick, are successfully darkened by overlapping banks of light-proof window shades, venetian blinds, or draw draperies.

Complete floor-to-ceiling window walls of glass are light controlled successfully with continuous installations of opaque draperies mounted in the ceiling or venetian blinds.

As Mr. Schmitthausler and his teacher committee continue their study they can select from among the light-control plans and installations being currently offered by at least 15 American manufacturers of this equipment. All are successful in converting existing classrooms for the effective use of projected materials in the course of day-to-day work.

• • •

THOSE who are responsible for buildings now being planned or under construction have the advantage of *building room light-control equipment into these plans*. If it may be assumed that the classroom is to be the center of audio-visual instruction for the obvious reason that it is in the classroom that *all* the work-study activities go on, then suitable arrangements for "study" lighting as well as for *audio-visual light control* may become a part of initial schoolhouse planning.²

The superintendent, architect and audio-visual director have traditionally decided upon one of three classroom lighting types. These need to be examined!

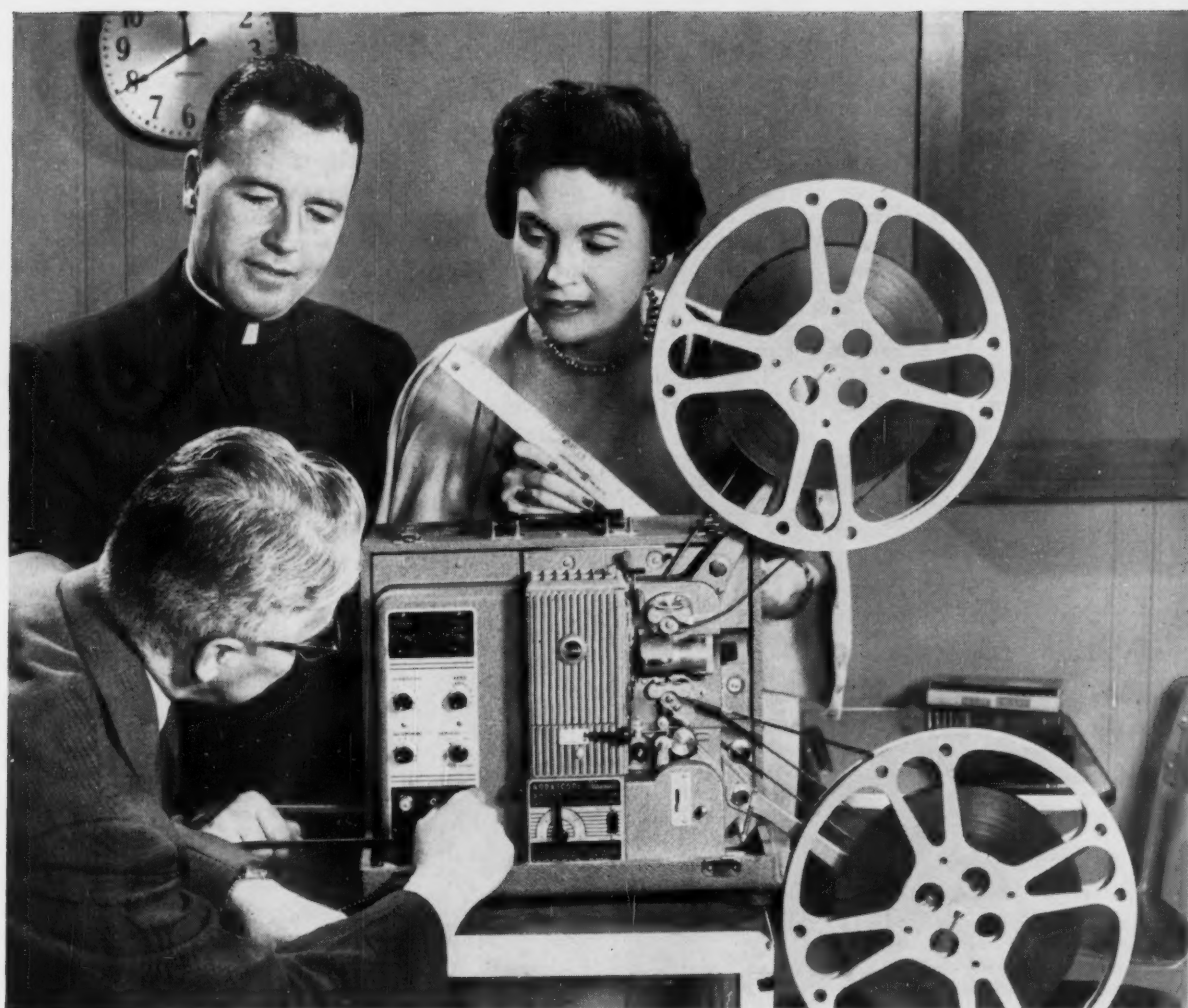
The large window-wall classroom provides the standard 30 foot candles along inside wall areas; however, two to three times this amount of light may flood the window-wall side.

The "cross-light" classroom also provides the 30 foot candle standard near the center of the room, but more than this near both window walls.

The window wall and "dome" classroom similarly yield varying natural light levels.

Similarly, the superintendent, archi-

²Many architects recommend individual classroom light control as an effective provision for audio-visual materials use and as a further economy; it seems indefensible to spend \$25,000 on a special audio-visual room when this same space could be used as an additional classroom. This same amount would more than cover individual room-darkening costs plus the cost of purchasing sound projectors, filmstrip projectors, opaque projectors, and other equipment for the entire building.



...now let's pick the right 16mm sound projector

Educational leaders who know the value of films as a teaching tool know, too, how important the right projector is.

Here are some of the questions they ask—and answers that can help you make a wise choice.

1. Is it easy to set up? You'll want a machine that can be handled confidently by many people, including inexperienced operators. Try the Kodascope Pageant 16mm Sound Projector. Hinged reel arms, with attached drive belts, fold quickly into place. Even a novice can follow the threading path, printed on the machine. This makes for smooth, sure starts... every time.

2. Are the pictures bright and sharp? You don't have to be satisfied with washed-out pictures, even in hard-to-darken rooms. The Pageant's special Super-40 Shutter puts 40% more light on the screen at sound speed than ordinary shutters. You get sharp images, full of sparkle and important detail... the

kind of pictures that catch and hold attention on the screen.

3. Can it use the full range of sound on the track? Sound-track sound, not projector noise, is what you want. And you get just that from a Pageant because you have a complete sound system—true-rated amplifier, well-baffled speaker, and separate base and treble controls. And the Pageant's nylon gears give you whisper-quiet operation.

4. Is it always ready when and where wanted? Pageants are lubri-

cated for life. This ends the most common cause of breakdown and keeps maintenance to a minimum. And a Pageant is easily *portable*—ready for use anywhere, at a moment's notice.

For a complete demonstration of how a Pageant can help you make the most of every showing, visit a nearby Kodak Audio-Visual dealer. Or write us for details. No obligation, either way.

P.S. With the addition of Kodak's exclusive Bi-Focal Lens Converter, any Pageant can be used in a small or large room and still provide the right-sized screen image.

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Please send me complete information on the new Kodascope PAGEANT 16mm Sound Projectors and tell me who can give me a demonstration. I understand I am under no obligation.

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tect and audio-visual director may decide upon one of three rather standard room shapes.

A fourth and new kind of classroom structure and shape should be examined and investigated by those who wish to provide for the classroom use of audio-visual learning experiences. Natural lighting is seldom adequate to provide uniform lighting for study purposes but is very necessary in that it allows the student to identify himself with the out-of-doors. Since it is seldom possible to illuminate a classroom uniformly with natural light,

some means of artificial light must be provided; hence a new kind of classroom which will be referred to henceforth as the vision-strip audio-visual classroom seems to be a possible answer.

The vision-strip audio-visual classroom holds the promise of satisfying many of the demands for economy and instructional efficiency and pupil-teacher comfort which represent needs of contemporary school planning. This classroom³ holds many advantages:

1. It costs less to construct.
2. It costs less to maintain.

3. It provides efficient classroom conditions for audio-visual teaching.

4. It permits low-cost room light control.

The vision-strip classroom has been built in the Midwest since 1950. Such classrooms may be seen in the Minneapolis, Minnesota and Wisconsin areas. One short wall is the window wall; the other short wall faces the corridor. Across the entire external short wall is a window of clear glass, limited to a height of 4 feet to accomplish good visual association with the out-of-doors, but natural lighting is not depended upon for work-study illumination. Planners of such a room assume that external lighting sources cannot adequately illuminate a classroom but that manufactured light should be on all during the working classroom day.

The vision-strip, short wall-window classroom is economically built, low in maintenance cost, and guarantees uniform 30 foot candle light levels through manufactured light. At the same time it permits efficient and low-cost room light control as well as uniform mechanical ventilation.

The vision-strip classroom provides larger wall areas for chalkboard and tackboard space. The 24 by 32 foot area is identical with traditional classrooms except for its orientation and will permit wide latitude in room organization.

The vision-strip classroom offers a workable and efficient audio-visual classroom plan for these reasons:

1. Low-cost initial building expense.
2. Low-cost annual maintenance—heat and light.
3. The 4 foot high wall window in clear glass *vision strip* is psychologically adequate to provide pupil identification with the out-of-doors.
4. The 4 foot vision strip is a relatively small area to be light controlled. Low-cost interlocking or venetian blinds, running draw-line draperies, or sill-stored window roller shades may be inexpensively installed and maintained.

5. Uniform ventilation and lighting are built into the classroom.

I strongly urge that the vision-strip audio-visual classroom idea be presented to school authorities and architects for study and construction as new schoolhouse planning and building go forward. #

³Adapted from Wittich, W. A., and Schuller, Charles F.: *Audio-Visual Materials—Their Nature and Use*. Harper and Brothers, revised 1957, Chapter 16.

Architects:
Austin, Field and Fry,
A.I.A., Los Angeles

Builders:
Wood Bros., Alhambra, Calif.

**LIGHT TIGHT
for AUDIO-VISUAL**

Lemlar Solar Control Louvers are instantly operable and light-tight while providing adequate ventilation that assures alertness in every classroom of the John Muir Junior High School, Glendale, California. The need for inside blinds or drapes and their high maintenance cost is also eliminated.

**SUN LIGHT,
SOLAR HEAT CONTROL**

Rooms are shielded from sun and sky glare and bathed in diffused light evenly distributed throughout when louvers are in "open" position. Heat loads at windows are reduced by as much as 85% for year 'round comfort.

Lower vanes of the Lemlar type SJ-9 Louvers also provide a "living quality" outlook by adjusting more rapidly than the vanes above.

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SOLAR CONTROL



From large families or small- students need freezer instruction!

Some of your students are members of large families. Others may be the only child in the family. But in either case, the freezer is playing a bigger part in their home life every year. This appliance has really become a "member of the family."

Such a situation calls for action on *your* part. Your home economics students need instruction on the packaging, freezing and storing of foods. They need to know how to use the appliances that are in their homes.

Teachers must be prepared to give them such instruction.

...but, your teachers need freezers!

Freezing can't be taught entirely from a book. Students must learn by *doing*, and the only way they can do that is with actual food freezers in your schools' home economics departments. This appliance is easily installed, needs no special wiring—just plug it in. The purchase cost is moderate, and your local electric light and power company or electric

appliance dealer can give you all the facts.

YOUR SCHOOLS NEED THE FREEZER TEACHING KIT, TOO!

This Kit provides visual aid for home economics teachers, to simplify freezer instruction in the classroom. It consists of 12 beautiful, full-color wall charts and the Home Freezer Teaching Guide. Be sure your school has a Kit. Send for it yourself and present it to the home economics teacher.

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Address.....
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THE SCHOOL LUNCH

Conducted by
Mary deGarmo Bryan

Children are offered "more than bread" by these

Three Methods of Classroom Feeding

*Money saving plan creates closer relation between
teacher and pupil, aids discipline and nutrition,
serves as laboratory for developing improved
personal and social graces of class members*

MARGARET E. TERRELL

*Professor of Home Economics and Director of Dining Halls
University of Washington, Seattle*

WHILE to many administrators the term "lunchroom" means "cafeteria," the *classroom* lunchroom has been gaining in popularity. In Washington State, for example, some two hundred schools are using classroom lunchrooms.

As in many other instances where necessity was the mother of invention, "classroom feeding" was initiated and its growth was given special impetus by a shortage of funds for food service space and equipment. School authorities came to realize, after some of the initial problems were ironed

out, that in this new program they have a feature possessing splendid potentials. Teachers who at first objected to the classroom lunchroom arrangement, on the basis that it imposed on their personal time at noon, now acknowledge that they like it better than the general dining room plan.

Among the advantages indicated for classroom feeding are the following:

Discipline is easier to maintain than in the general cafeteria type of service. Each teacher is with her pupils when they are served and while they are eating. The close and friendly asso-

ciation and the quiet, orderly atmosphere facilitate much valuable training during mealtime. The familiar surroundings of the classroom offer fewer distractions for the youngsters; they can be encouraged to take sufficient time to eat their lunch and to eat the proper foods. Good personal and social habits can be promoted effectively with each individual in the smaller group.

In each school where the classroom lunchroom plan is in use, the food originates from a central kitchen. The methods of serving, however, vary with



After the children at McMicken School, Seattle, have washed their hands, they line up with the teacher and file in orderly fashion past a portable serving counter, brought from a central kitchen to the hallway adjacent to their classroom. After he passes the cashier, each pupil picks up his bottle of milk. Servers adjust servings to the needs and tastes of the children. Older pupils are permitted to serve themselves. The teacher tries to see that all take the food they should have.

FOR SCHOOLS AND COLLEGES

Sexton *Quality Foods*

The greatest food service
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Sexton sells and services directly more schools and colleges than any other wholesale grocer in America. First in its field, Sexton excels by providing foods famed for consistent quality and uniformity—all backed by the 74-year-old Sexton reputation. The coast-to-coast warehouses of the Sexton network always carry complete stocks of fine foods, outstanding in extent and variety—and you get fast dependable delivery through the great white fleet of Sexton trucks. Sexton service is specialized to meet institutional needs—and a trained Sexton representative will gladly assist you in ordering to fit your wants.



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ABOVE: In one room the children's custom is to take turns asking their teacher to be a special guest. All stand at their places at the classroom table until the teacher comes with her pupil host. BELOW: Children and teacher sing grace before being seated. The host seats his guest and is responsible for entertaining her during the meal. All enjoy acting as hosts.



BELOW: The family style of seating offers an opportunity for noontime discussion—a chance for youngsters to learn to appreciate others' ideas and their right to speak. In one upper grade pupils pick a subject to discuss under the direction of a moderator selected by the group. They have fun "sounding off" on pet topics while learning round table technics.



the individual buildings, since the physical layout will influence the best serving method to use.

Single-Story Building: Schools having all rooms on one floor and in one building are easy to serve. The food trucks may be rolled along the corridors to locations in the rooms or in the hallways adjacent to the rooms.

In order to clarify the manner in which classroom feeding functions, an example was chosen from an area where the system had become well established, the Highline schools of Seattle. They were among the first to institute this type of service. Pictures showing how the plan works at McMicken School, a member of the Highline group, appear with this article.

Multistory Building: Food transportation presents a greater problem when the school occupies several floors. Being used successfully in such schools is a common cafeteria serving unit. The pupils go to the cafeteria for their food and return with it to their own classroom table. The plan of having each pupil carry his tray up or down stairs seems to present fewer difficulties than the carrying of large quantities of hot food and serving equipment to the several floors.

More Than One Building: The "hot sack lunch" has been found useful in schools where food must be distributed to separate buildings. The menu for this type consists of the foods required in the Type "A" lunch. A casserole item is the one hot food used. This is served in a covered paper cup. The cold items are placed in the sacks well ahead of the serving time and the container with the hot food is added at the last minute.

PAPER SUPPLIES IMPORTANT

Paper does not conduct heat readily. This means that the casserole food will remain at a palatable temperature for several minutes. The desirable temperature can be maintained further by packing the filled cups together in a bus-box for transporting or by placing them in trays in a heated truck. It is essential to sanitation that the hot protein foods be held under proper conditions and served quickly. Each cup can be added quickly to the cold sack at the time of service.

Paper supplies are an important expense in this type of service. Careful planning and alert control are needed to keep this expense in line. Each lunch may include: a No. 6 bag, two short straws, a napkin, a wooden spoon

Institutions MAGAZINE

FIRST

Award


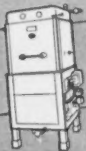


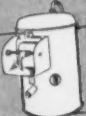
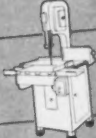


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HOBART MACHINES
OUTSCORED
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PRODUCT	NUMBER OF AWARD KITCHENS USING THIS TYPE MACHINE	PERCENTAGE OF HOBART INSTALLATIONS IN AWARD CLASS	AVERAGE NUMBER OF HOBART MACHINES PER INSTALLATION
 Cutters, Food	36	67%	1.29
 Dishwashers	45	62%	1.43
 Glasswashers	32	72%	1.26
 Mixers	41	95%	2.53
 Peelers	38	61%	2.00
 Saws, Meat	17	53%	1.00
 Slicers	38	74%	1.39
 Tenderizers, Meat	10	50%	1.20

45 Food Service establishments received awards

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The World's Largest Manufacturer of Food,
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Ask why—in 8 machine categories—Hobart, with 50% or more of the totals, surpassed all other brands combined. Ask why kitchen managers, stewards and chefs—famous as careful, shrewd buyers—so prefer the Hobart quality and superior performance backed by the greatest name in the food, kitchen and dishwashing machine industry.

Ask yourself—your friends in the business—your own well-established local Hobart representation. Ask—get the answer—and profit. The Hobart Manufacturing Co., Troy, Ohio.



At the close of the meal each pupil takes his tray to a collection center. He returns his glass milk bottle to the crate and gives his tray to a pupil who scrapes it with a rubber scraper and stacks it. Pupils take turns doing this work. Each room has pupil house-keepers who take turns wiping the tables and sweeping the floor after lunch. They feel important and helpful, like their work, and do a good job, teachers say. Cecelia Wheeler, director of food service, and teachers at first had grave doubts about room feeding but now all are enthusiastic.

BEAUTIFUL BOONTONWARE



America's best-known melmac dinnerware Now...in nine handsome colors!

Here are nine beautiful reasons why you'll want Boontonware dinnerware! They are the superb decorator-inspired colors, so handsome when matched or mixed together. But, these colors are just part of the story of this finest commercial dinnerware. Boontonware makes food look more appetizing, stay hot or cold longer; and it stacks evenly, handles quietly. It's practically indestructible.

Today, Boontonware is the dinnerware found in millions of homes, in all fine hospitals, schools and restaurants because it does all the things good commercial dinnerware should do, and it practically pays for itself.

There is a complete line for you—plates, bowls, cups and service dishes. See your regular supply house or write us for the name of your nearest dealer.

NINE COLORS TO MIX OR MATCH

Gray	Yellow	Honeydew
Pink	Charcoal	Buff
Rose	Turquoise	Blue

Boontonware®
MELMAC DINNERWARE AT ITS FINEST—

Boontonware complies with CS 173-50, the heavy-duty melamine dinnerware specifications as developed by the trade and issued by U. S. Department of Commerce, and conforms with the simplified practice recommendations of the American Hospital Association.



MANUFACTURED BY BOONTON MOLDING CO., BOONTON, N. J.

or fork, a 6 ounce cup and cover, and a 4 ounce cup for salad or dessert and cover. These items, procured in large quantities, may cost slightly less than 4 cents a setting. Savings in labor and equipment will help to offset the cost of the paper supplies.

The clean-up following the meal is greatly simplified by the sack lunch system. The children deposit the sacks at a central disposal point for incineration, eliminating the need for dishwashing labor, supplies and equipment.

Great ingenuity is needed in planning and preparing this type of lunch in order to ensure its appeal. The attractiveness of the food is hidden by the paper container. Wise use of the surprise factor, on the other hand, may help to make this type of serving a favorite of the children.

The packaged lunch cannot be adjusted readily to individual needs and tastes. Special precaution must be taken by the planner to avoid a repetitious pattern that will become tiresome. But these obstacles are not insurmountable by a dietitian who has imagination and a sincere interest in the pupils.

HUMAN RELATIONS, TOO

Classroom feeding has brought recognition of important qualities in living which can be effectively realized with the children through this lunch service. Industrial lunchrooms have long been established as a part of an indoctrination and human relations program, not alone for food service. Social planners know that the goodness of the food may govern the success of the party. It is natural for families to be brought into closer relationship and harmony at mealtime. Benefits derived by pupils as they enjoy their food around the table with their teacher may well be more than bread.

#

BIRMINGHAM * ATLANTA * CHARLOTTE * CHATTANOOGA * CINCINNATI * KNOXVILLE * NASHVILLE * NORTON * PHOENIX * RICHMOND * WASHINGTON

Gentlemen:

Only about one-third of our glasses are kept in service for more than a year. We like to serve our customers with sparkling clear tumblers, so we retire them from service after a comparatively short time. These retired glasses are then donated to various benevolent organizations -- so the tumblers actually serve two lifetimes.

Yet the average number of servings for each of 871 tumblers before retirement was 1,254 -- or only 6.1¢ per 1,000 servings. We are extremely satisfied with the results of our survey -- made possible by Libbey Heat-Treated DATED Glassware.

Sincerely yours

Frank O. Jewell

President



HT-1810
9-ounce tumbler

At right, Libbey Heat-Treated DATED Glassware is being easily checked in S&W Cafeteria by the Heat-Treated mark on the bottom of every glass.

LIBBEY HEAT-TREATED GLASSWARE
AN (I) PRODUCT

The unique program of S&W Cafeteria in Atlanta, Georgia, assures patrons of sparkling tumblers at all times. Glasses are kept in service for about one year and are then "retired"—turned over to local benevolent organizations to serve a second lifetime helping the community.

You can easily check your own glasses. The Heat-Treated mark on the bottom of each tumbler indicates date of manufacture—left number shows year and right shows quarter. Add up the number of servings to see the economy of Libbey Heat-Treated DATED Glassware—backed by the guarantee: "A new glass if the rim of a Libbey 'Safedge' ever chips."



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GENERAL OFFICES • TOLEDO 1, OHIO



Who Does the Job— How Long Does it Take

In this day of teacher shortage and restricted budgets, non curricular jobs should be done the fastest, least expensive way. Does handling lunchroom receipts delay getting your afternoon classes started on time? More and more schools are doing the job by electric machine. The KLOPP counts 2700 coins per minute with positive accuracy—inserts them in wrappers for bank deposit.



KLOPP COIN COUNTER

Electric
and
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models.

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Klopp Counters & Klopp Sorters.

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The Superintendent's Task: Improving Instruction

Review of A.A.S.A. Yearbook by C. C. TRILLINGHAM
Los Angeles County Superintendent of Schools and Yearbook Chairman

THE SUPERINTENDENT AS INSTRUCTIONAL LEADER. *Thirty-fifth Yearbook of the American Association of School Administrators, N.E.A., 1201 16th Street, N.W., Washington 6, D.C., 1957. Pp. 226. \$5.*

THE superintendent of schools knows that his most important task is that of improvement of instruction, for it is a mark of every profession to increase continually its store of knowledge and to refine its technics. This is the challenge which the yearbook commission* has attempted to meet through suggested procedures and technics which should apply equally to superintendents of large and small systems.

The commission holds that the school superintendent who has been most concerned in recent years with obtaining the necessary money, teachers and buildings to carry on the educational program must increasingly concern himself with what he would do for the learners if all those physical necessities were available.

The professional growth of the school personnel and the improvement of curriculum and instruction seldom exceed the personal interest, enthusiasm and encouragement displayed by the superintendent. His concern with such matters as the reduction of class size, the provision of necessary time for teachers to take part in professional growth activities, the participa-

tion of teachers in policy making, the minimizing of classroom interruptions, the provision of adequate clerical help, the interpretation of the results of teaching to the public, the interpretation of the public's concern to the teachers, and other such factors that help make it possible for classroom teachers to teach are also eloquent ways in which the superintendent properly assumes responsibility for improving instruction.

The 1957 yearbook gives full recognition to the frustrations that the school leader faces when a multitude of other problems, large and small, clamor for attention. The superintendent sometimes becomes discouraged because many of the duties he must perform seem so remote from the actual teaching process, but, according to the commission, he should realize that whatever he does to create conditions so that better teaching can take place is a contribution to the improvement of instruction.

When he helps to build a better building, when he is instrumental in getting a more adequate budget, when he refuses to succumb to pressure to employ an incompetent teacher, when he protects teachers and children from well meaning promoters of essay contests and interruptions in the daily schedule, he is contributing to improved instruction. When he is able to obtain better lighting or acoustical conditions or improved sanitary conditions, he is making better instruction easier. Again, he contributes to improved instruction through such activities as selecting better teachers, bolstering morale, creating better working conditions, defending teachers against unfair criticism, and utilizing as fully as possible the potential abilities of each staff member.

Beyond these indirect contributions to the improvement of the instructional program, the 1957 yearbook points toward an organized program for the improvement of instruction.

*Members of the yearbook commission are: C. C. Trillingham, superintendent, Los Angeles County, chairman; Stephen M. Corey, dean, Teachers College, Columbia University; Johnnye V. Cox, director, program for the education of supervisors, University of Georgia; W. W. Eshelman, supervising principal, Upper Dublin School District, Fort Washington, Pa.; Philip H. Falk, superintendent, Madison, Wis.; Robert S. Fox, director, university experimental school, University of Michigan; T. J. Jenson, superintendent, Shorewood, Wis.; Truman M. Pierce, dean, school of education, Alabama Polytechnic Institute; Lucille Ramsey, teacher, Orange, Tex., and Dean M. Schweickhard, state commissioner of education, Minnesota.



**Ernest A. Wild, Athletic
Director, Woodrow Wilson
High School,**

writes . . .

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"A major concern of administration is the establishment of the right conditions and the encouragement and initiation of effective processes. In this regard the administrator works with *human* and *material* resources. His skill and success are measured by his effectiveness in coordinating and utilizing the resources at hand and in providing for effective growth in staff members.

"The superintendent is the key person in a cooperative problem-solving process. He is the 'player-manager' on the team. The commission believes

that this is a positive clue to the busy school executive who desires to do something about upgrading the effectiveness of his schools. He is the one person who can do most about providing the *conditions* and encouraging and arranging *processes* for cooperative action."

This cooperative research method of instructional improvement commits the educational leader to a twofold responsibility: (1) to provide members of his staff with the kinds of resources needed, and (2) to see that people become increasingly skillful as

they engage in the cooperative problem-solving process.

"It is not always easy to keep in mind that the superintendent or other educational leader does much to establish the group norms so far as personal relations are concerned. When he demonstrates that he is genuinely considerate of other people, that he values them and considers them important and does not punish expressed reflections on his judgment, he does a great deal to establish an atmosphere that makes for better human relations throughout the school system. This kind of behavior on the part of the educational leader, however, is not easily engaged in. Superintendents are like everybody else in that they vary greatly in personal security, self-confidence and self-respect. A superintendent who is somewhat fearful and has doubts about his own capacity and is sensitive about his own judgment *cannot* behave in such a way as to make it easy for other people to express themselves candidly."

WAYS TO FIND HELP

The commission has pointed the way for superintendents to find help from many valuable resources. "In addition to their professional staffs and qualified lay persons in their own school districts, state departments of education, and university and college staffs are often in a position to give advice and help on request.

"Another growing resource is the staff of competent consultants and specialists in the offices of county superintendents of schools who stand ready to work with local school district leaders in assessing instructional needs, evaluating results, and planning programs of inservice growth and improvement based on priority needs. Arrangements can be made for less able teachers to visit those who are doing superior teaching or to participate in special institutes or workshops planned to promote professional improvement. The school leader today need not feel alone as he goes about the task of providing the facilities and conditions that are necessary for the best possible teaching and learning."

Extending further these practical suggestions of ways of obtaining help in improving the instructional program, the commission has provided detailed descriptions of actual procedures in outstanding school systems throughout the nation. Among the illustrations are promising practices

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A Spencer Vacuslot system incorporating a centrally located vacuum producer and dirt separator ... with piping throughout the building ... speeds routine maintenance, greatly improves sanitation.

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Bulletin 153B describes Spencer Vacuslot system, shows equipment in use. Request your free copy.



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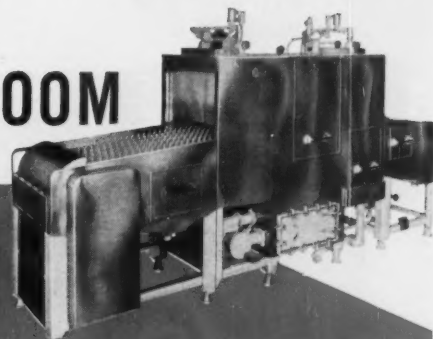
BIG DISHWASHER PERFORMANCE FOR THE SMALL DISH ROOM

**NEW-SMALL
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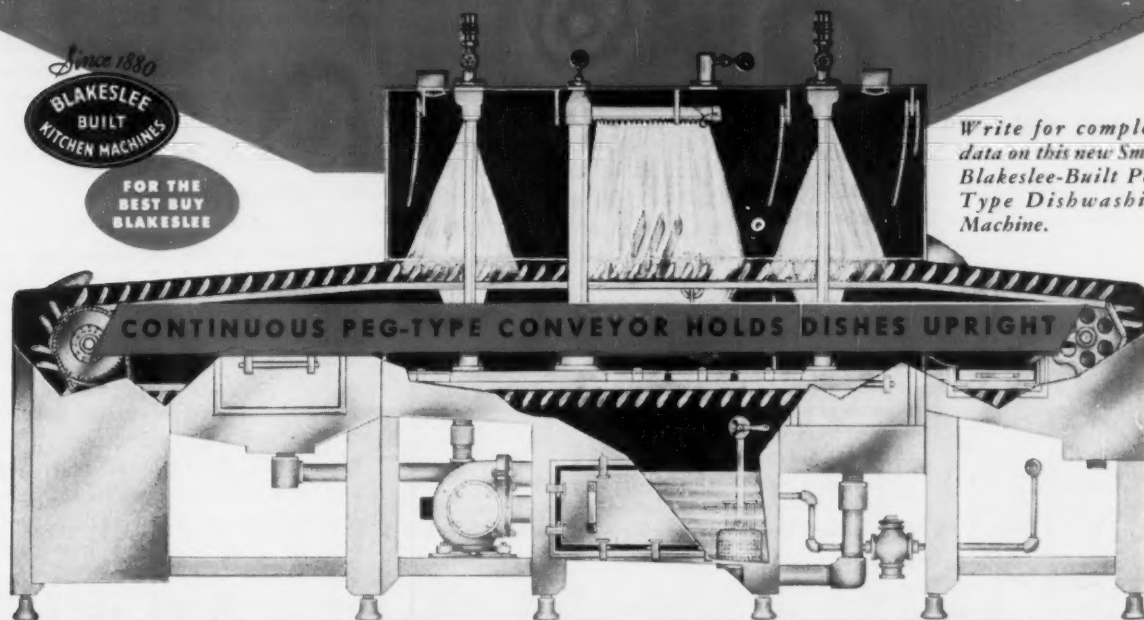
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EXCLUSIVE DUAL PURPOSE SAFETY GUARD

Permits planing stock to uniform ribbon thinness. Pressure of thumb holds small pieces down while guard controls side pressure.

See that your students have the advantage of developing their craftsmanship with the Walker-Turner 6" Jointer and other "Light-Heavyweights"—the tools that are preferred by industry for accuracy, long life, and true economy. Mail coupon for details, or contact your W-T distributor for a demonstration. He's listed under "Tools" in your classified telephone directory.



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relating to orientation of new teachers, teacher promotion, substitute teachers, school-community relationships, cooperative inservice education, provision of physical environment for improved instruction, leadership development, and evaluation procedures.

In summary, the school superintendent in America today is the chief coordinator of a professional team engaged in the complex enterprise of providing good education for all children and youth in his community. As educational leader of school and community, his main task is that of working with his professional and lay associates in providing the facilities and conditions that will ensure good teaching and learning.

The successful administrator has the vision, the courage, and the energy to inspire the kind of teacher participation that will result in high group morale. He succeeds in obtaining the understanding, cooperation and advice of selected lay representatives who are sensitive to the highest purposes and possibilities of public education. He arranges to have the teaching staff provided with the necessary variety of teaching aids and materials to encourage a superior quality of instruction in the classrooms.

To exercise this kind of leadership as an educational statesman, the superintendent must possess a high degree of personal integrity and emotional balance, more than ordinary physical stamina, and an ardent belief in public education as a vital force in community and national life. For these qualities, coupled with an administrative competence growing out of appropriate training and experience, are the qualities of the good superintendent.

CASE HISTORY GIVEN

One major case history constitutes the theme of "The Superintendent as Instructional Leader," that of John Jones, who symbolizes the young superintendent facing the most insecure, hazardous, enervating, frustrating and difficult job in education. His own personal development comes through the long struggle to achieve security at his job. He finds new understanding and faith in cooperative problem solving and becomes a self-directing person. In developing this new-found security, he also develops a greater sense of confidence in the ability of others. He finds satisfaction in a public service that can be equaled by no other profession. #



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A CAPACITY FOR EVERY SCHOOL REQUIREMENT



10802—60 pupils



8802—60 pupils



6802—48 to 54 pupils



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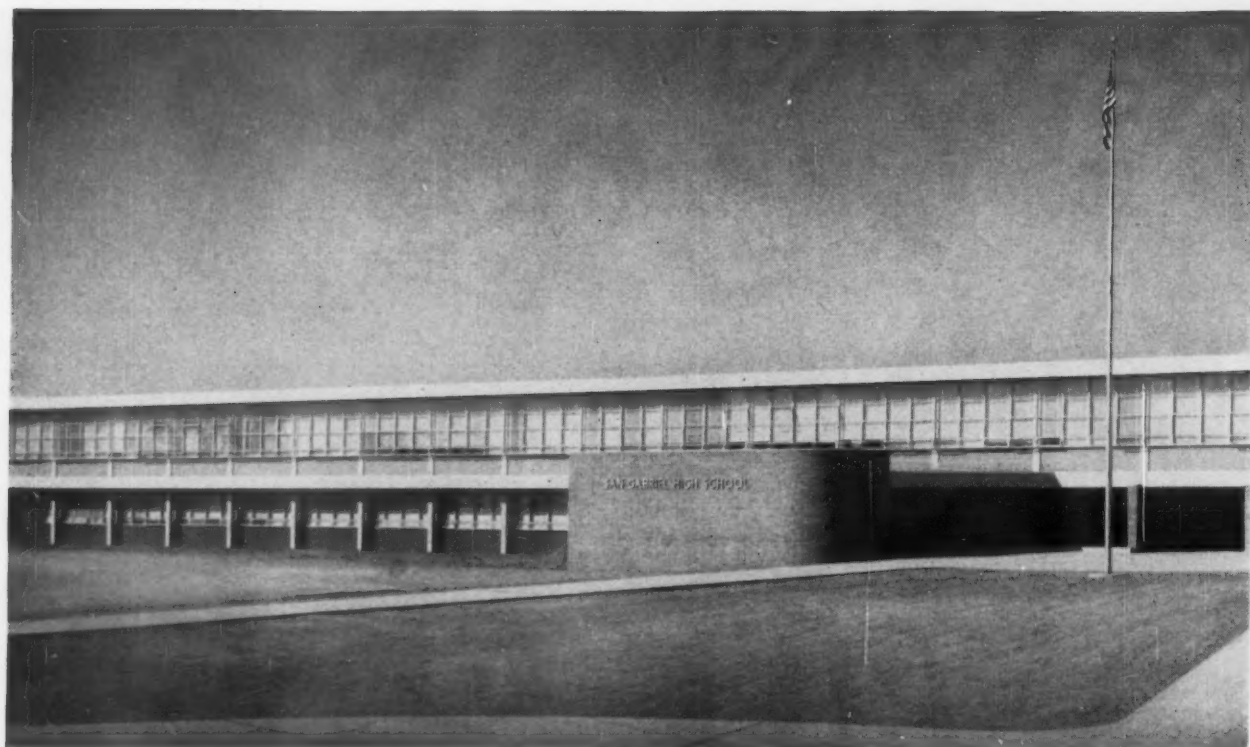
3802—16 to 20 pupils



3106—8-pass. Carryall

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*ACRES of Pittsburgh Glass
brighten this dramatic new school*



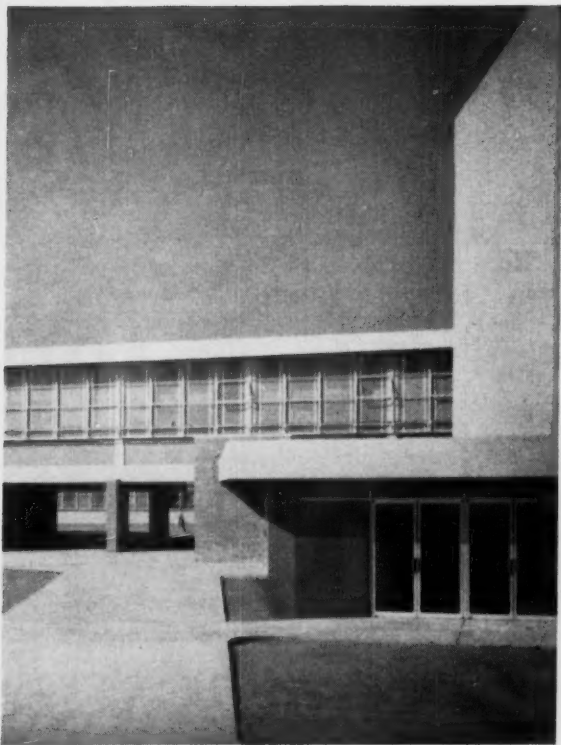
IT'S THE SAN GABRIEL HIGH SCHOOL, near the home of the famous San Gabriel Mission in California. The architectural theme was inspired by Plato: "Knowledge which is acquired by compulsion has no hold on the mind."

What an important place glass plays in this design concept! In the words of architects Smith, Powell & Morgridge, Los Angeles, the acres of Pittsburgh Plate Glass "create their own environment and seasonal displays." Most of the glass used to achieve this end was $\frac{3}{8}$ " Pittsburgh Polished Plate Glass and Pennvernon Window Glass.

There are some interesting design ideas here. "Borrowed light" is one. The upper part of partitions between classrooms and hallways is glazed, so that classroom light is diffused into the halls. Also, the area above the lockers (which are located outside, on balconies) is glazed to make use of *that* light, too.

See what the skillful use of glass can do to a school!

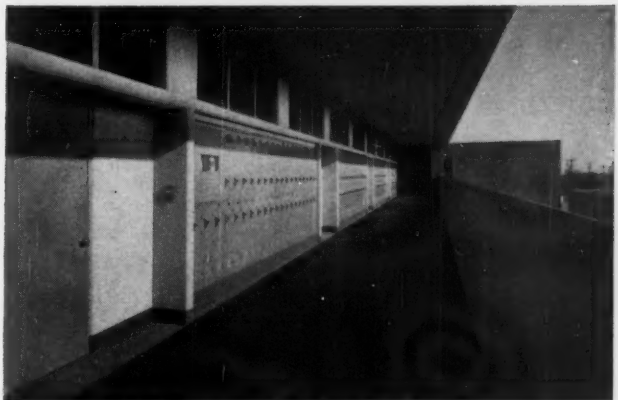
"Borrowed light." Classroom is behind wall at the left.



Gym. Clerestory windows get rid of the gloom.



Cafeteria. Plate glass doors roll back for outdoor eating.



Outside lockers. Notice glazing above them.

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Teachers for Our Times

Book Review by **MARCUS BACH**

Associate Director and Professor, School of Religion, University of Iowa

THIS book stands at the intersection of a growing community interest in the quality of teaching and a growing educational responsibility in the selection and development of teachers of quality. But it is more than a static guidepost pointing the way. In a very

real sense, it is the way itself for those who are ready to engage in the daring and creative elements of leadership.

"In trying to make education more effective," says John Harold, "we have gathered together knowledge, put it in books, cataloged it, and called it for-

mal education. We tend to overlook or at least underemphasize that the purpose of education . . . is to improve our culture and make it worth preserving."

The energy of this little book (less than 100 pages) is generated out of the author's personal experiences and deep insight into the contemporary need for the public school to be a part of the total life of the community and a vital, constructive force in the destiny of every child.

The book might well be titled, "A Superintendent Speaks His Mind." Author Harold has taken the most salient problems and questions about school administration into the laboratory of his own experiences. The result is a straightforward discovery: Education can fulfill its function only if it



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Versatile, safe, mobile units that seat 20 children or 18 adults in knee-free, uncrowded comfort. The shallow all-steel wall cabinet can be recessed-in-the-wall in major remodeling and new buildings or placed against-the-wall in existing rooms. Tops of Linoleum, Resilyte or Formica plastics. Tubular steel legs. Simple, easy-to-operate folding mechanism. Overall cabinet size: 7' 2" high, 5' 4" wide, 6 1/2" deep. Doubler Table . . . 13' 10" long, 30" wide, 29" high. Benches . . . 13' 10" long, 12" wide, 18" high. Also made with one or two tables only or two tables and four benches.

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TEACHERS FOR OUR TIMES. By John Harold, superintendent of schools, Cedar Falls, Iowa. Edited by Guy Wagner, director of curriculum laboratory, Iowa State Teachers College, Kansas City, Mo.: Intercollegiate Press. Pp. 93.

stops apologizing for its troubles, concerns and limitations and surmounts them with dynamic leadership. This includes not only the need for creative teachers but ideas, methods, programs and technics.

Every teacher should be given a copy of this book as an inspirational working manual. Every community leader might well read it with profit as a challenge to better understanding of the school's function and an insight into the kind of awareness behind the work of a modern educator.

There is bound to be some criticism about the "popular approach" and the general format of the book, but these features, to me, constitute some of its finest qualities. Here, at long last, is a readable book which brings educational problems out of an academic limbo and sets them squarely before the teacher in the classroom, the clergyman in his parish, and the parent in his home. There are many quotations from authoritative sources. The book abounds in illustrative and anecdotal material and should spur us on to realize the infinite potential of the school's function in American life, and cause us to appreciate better the high and holy calling of those who teach and inspire the youth of our land.

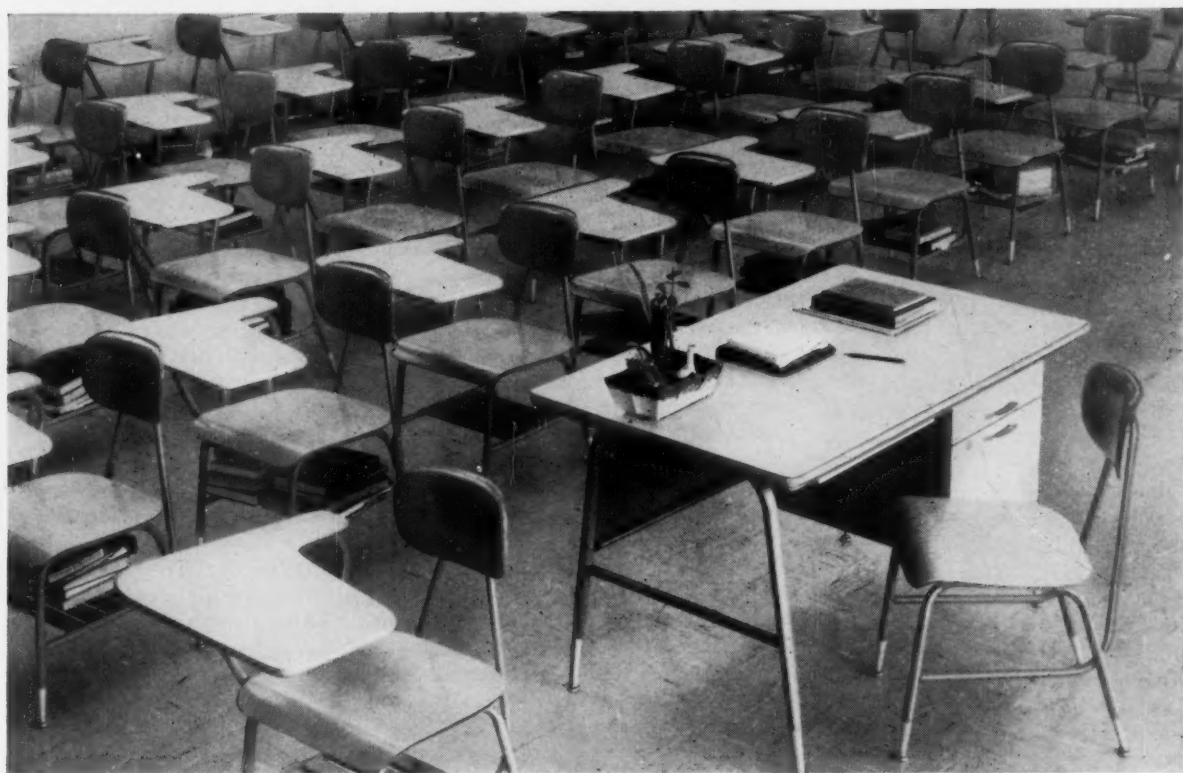
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Dr. John English, Supt. of Schools, Inkster, Mich., says: "We chose Samsonite Classroom Furniture because its styling, durability and comfort were in keeping with our modern new school."



wire from **W**ashington

By EDGAR FULLER

Construction legislation

► The question most asked in educational circles here is about the chance of enacting federal school construction legislation in 1957. The first bill of any kind introduced in the 85th Congress was Resolution No. 1 by Rep. Augustine G. Kelley (D.-Pa.) calling for \$600,000,000 annually for six years to be distributed according to the number of persons 5 to 17 years of age in each state. Numerous other bills, including that of the Administration, will also be before the Congress.

After the narrow defeat of last year's Kelley bill, the chorus of disappointment was led by President Eisenhower. Since then both political parties have committed themselves more strongly in favor of the legislation than ever before.

Representatives of major education organizations have been consulted about the Administration's legislative plans by H.E.W. Secretary Marion B. Folsom, Undersecretary Herold C. Hunt, and other officials. Educators anticipate the important part that Commissioner Lawrence G. Derthick will play in regard to the Administration bill. The recent election gave the "new Republicanism," which tends to favor the legislation, a boost over the ultra-conservatives who have always opposed it. The President is expected to be more active on behalf of federal aid than in 1956.

In December, Rep. Adam Clayton Powell Jr. (D.-N.Y.) said privately that his "anti-segregation" amendment might be introduced as separate civil rights legislation rather than added to school construction bills, but because he was not disciplined by the Democrats for supporting Eisenhower for re-election, he has changed his mind. While there is some opinion in Washington to the contrary, I believe that the Powell Amendment will be defeated in 1957. A stronger prohibition of federal administrative control of state and local arrangements for edu-

cation should bring many Southerners back to their traditional support of the legislation. This would leave the segregation question to the judiciary as prescribed by the Supreme Court.

There are other plus signs, too. There is a continuing and widespread need for school facilities. The isolation of schools on inadequate local property taxes has become more widely understood, and more people are demanding financial equity for education. Interest rates on school bonds are sky high, and even the *Wall Street Journal* has reported that this will mean more votes for the bill. The record breaking cost of construction and such interest rates will reduce the number of local school districts willing and able to finance school buildings alone.

Some sectors of the hard core of opposition will intensify their efforts to defeat the legislation. The old "numbers game" concerning need is being dusted off for use again, although the lowest need figure thus far found by anyone justifies more federal assistance than Congress is likely to enact. The U.S. Chamber of Commerce will further confuse this issue through an opinionaire circulated to its members.

Whether in this session of Congress or the next, the basic shift of the sources of national personal and corporate income away from local property and toward tax sources pre-empted by the federal government makes eventual enactment as nearly inevitable as anything can be in government.

Beyond the high school

► Chairman Devereux C. Josephs of the President's Committee on Education Beyond the High School has made a first interim report to the President. The committee has reached six preliminary conclusions:

1. Our ideals and the increasing complexity of our civilization require that each individual fully develop his or her talents.

2. The needs of the individual and

of society plus an unprecedented growth in the population of post-high school age will far outrun the present or planned capacity of existing colleges and universities and other post-high school institutions.

3. The needs of the oncoming millions of individuals with varying capacities and interests will call for a broader range of educational opportunities and less rigid time requirements.

4. Many more able and qualified teachers will be needed than present efforts can provide.

5. There must be promptly formulated an explicit, considered policy as to the rôle of the federal government in education beyond the high school.

6. Even with the best possible utilization of existing resources, additional financial support must be provided if the additional millions in the population are to be enabled to develop their talents fully.

The committee has sponsored five workshops in preparation for five regional conferences to be held between January and June of this year. These conferences are intended to stimulate informed public discussion and to assist the committee in making its own recommendations for action to citizens, educational institutions and local, state and federal governments.

Sound beginning

► The committee appears to have made a sound and encouraging beginning. It has courageously suggested that an even greater diversity of offerings for post-high school students, such as those found in two-year colleges, technical schools, and adult education, will be necessary to provide for greatly increased numbers of students during the next 10 to 15 years.

The topic sentence of the report is: "The inescapable fact about the future of education beyond the high school is that in 1956 almost twice as many children will be born in the United States



languages



orchestra



dramatics

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The new Webcor Educator Tape Recorders and Educator Fonograf-Speaker combinations include all the latest technical advances in the electronics and Audio-Visual field as recommended by the Webcor engineering and Audio-Teaching Aids Department.

The Audio-Visual teaching program has in recent years taken a new and vital position in the teaching process. The use of sound equipment in conjunction with visual aids has shortened instruction time and created new interest in learning among pupils of all ages. But most important to every teacher is the fact that the tape recorder and fonograf has made teaching itself easier and more creative.

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HIGH FIDELITY FONOGRAF



MODEL 4721



MODEL 1716

The educator Fonograf System consists of two portable cases—one housing the complete player unit, the other with two public address type speakers.

Powered by a five-tube, Webcor-built amplifier (including rectifier) with eight watts peak output, this new wide range fonograf has multiple inputs. Teachers can use a microphone to enjoy the benefits of their own public address system—or they can feed a radio tuner or tape recorder into the system. The microphone may be used while records are playing if the teacher wishes to monitor instructional records as they are played.

Each input has its own volume control for proper mixing of voices and music. Aux. input volume is regulated by fonograf volume control. Two external jacks are provided for use with the PA speakers and an output jack for an external amplifier when feeding this instrument into the school public address system.

Controls are scientifically arranged for complete ease of operation by teachers and pupils alike. Separate bass and treble controls are provided. Also included is a variable speed control for slowing down or speeding up the records being played.

The counter-balanced tone arm incorporates a new, wide range ceramic cartridge having a frequency response of 50-15,000 cycles. Two sapphire needles are provided.

The weighted and balanced turntable is shock-mounted to provide faithful tracking under severe conditions and vibrations.

The Webcor Educator is designed for use with two external speakers; a five-inch speaker has been built into the amplifier section to make the fonograf a complete, self contained unit.

A specially designed lavileer microphone and stand fits into the lid when not in use. May be used around the neck, in the hand, or sitting on the desk.

A twenty-five foot cord is provided for each of the two external speakers.

The unit is constructed of one-half inch plywood with reinforced corners, and has an attractive blue fabric covering.

The Webcor Educator System comes in two packages and each may be purchased separately:

Model 1716 consists of the player with its own self-contained amplifier and speaker with microphone.

Model BP4721 consists of an external two-speaker system designed specifically for use with the Model 1716 Fonograf and Model BP2640 Tape Recorder.

Specification Summary

Frequency Range: 50-15,000 cycles

Power Output: 8 watts peak

Speaker: Full range PM speaker

Cartridge: High fidelity ceramic flipover type

Tubes: 5 tubes (including rectifier)

Power Requirement: 110 v, 60 cycle AC, 70 watts

Turntable: Four speeds with variable speed control—permits 25% variation of indicated speed—plus 5% or minus 20%, e.g. 45 rpm from 36 to 47 rpm, 78 rpm from 63 to 82 rpm, etc.

Special Features: Separate bass and treble controls . . . monitor on-off switch . . . two speaker output jacks . . . one external amplifier output jack . . . mike input jack . . . Aux. input jack . . . separate volume control for PA speakers and monitoring mike . . . built-in 45 rpm adapter . . . rubber mat turntable.

Microphone: Wide range professional type microphone.

Model BP4721: Two 8" full-range speakers . . . 25' connecting cord with each.

a "blackboard of sound" in the

WEBCOR educator

HIGH FIDELITY TAPE-RECORDER



MODEL 2640

The new Webcor EDUCATOR Tape Recorder—specially designed for school use by Webcor engineers and Webcor Audio Teaching Aids Department—is of immeasurable value to teachers of English, History, Dramatics, Foreign Languages, Science, and virtually every curricular subject. It also shortens rehearsal time of bands and orchestras . . . helps develop musical and other creative talents of children.

The EDUCATOR has proven extremely valuable also in recording special events, music and other programs directly from radio and television for classroom study later.

Kindergarten teachers report that the EDUCATOR has enlarged the scope of kindergarten activities and stimulated the imaginative play of youngsters in their world of wondrous things. Actually, the usefulness of the EDUCATOR is limited only by the teacher's own imagination. Please see reverse side for your free copy of "Teaching Aids in the Audio-Visual Program."

Amplifier: Power output, 8 watts peak. Push-pull output circuit. Has multiple negative feedback circuits to insure negligible distortion. Frequency response 50-50,000 cycles.

Four-way Master Control: Record, playback, rewind, and fast-forward—all basic operations served by one central control.

Dual concentric control for volume "off-on" and tone.

Speaker System: Wide-range, high fidelity speaker designed for full range reproduction.

Frequency range: 50-8000 cycles at $3\frac{3}{4}$ ips
50-12000 cycles at $7\frac{1}{2}$ ips

Speeds, Reel Sizes: Plays 3-, 5-, or 7-inch reels at either $3\frac{3}{4}$ or $7\frac{1}{2}$ inches per second. Tape direction

at either speed can be reversed without "reel turnover."

Microphone: Has compact wide-range professional type microphone.

Motors: Two Webcor precision-built 4-pole induction type motors, electrically balanced.

Two Recording Heads: This feature makes possible two continuous hours of operation with no "reel turnover."

Automatic Stops: New, improved automatic stops shut off both amplifier and motors at either end of tape.

Playing Time: Records and plays back up to two hours on one reel of tape.

Counter: This unit has a speedometer type indicator to readily locate sections of type.

Recording Level Indicator: Cathode eye indicates proper recording level.

Input Jack: For recording with microphone or recording directly from AM-FM radio, TV sound, The Webcor Educator fonograf, model BP1716.

Output Selector Switch: The Educator has a three position output selector switch.

1. Normal for playback using the speaker in the unit.
2. Monitor permits hearing of recordings as they are being made. This position is operative with or without tape in motion.
3. External amplifier permits hookup with external amplifier or speaker.

Output Jack: Provides output circuit for external speaker or amplifier.

Shipping Weight: 49 lbs.



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HIGH FIDELITY TAPE-RECORDER/RADIO COMBINATION

The Webcor Model BP2790, which has all the features of Model 2640 is a combination radio and tape recorder which permits direct recordings of educational type radio programs directly onto tape. A permanent library of factual and interesting events such as the President's State of the Union Message can be recorded for classroom discussion at later date. Many educational radio programs may be brought into the classroom regardless of the time of the broadcast.

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FREE Webcor provides at no charge an interesting and informative Booklet titled "Teaching Aids in the Audio-Visual Program" to teachers and school authorities. This Booklet covers techniques for the use of Tape Recorders in teaching. Fill in and mail coupon for your copy.



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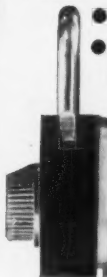
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No. 40



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← Swing left and remove for normal use

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A WEALTH OF FEATURES — Such as vertical frame strengtheners; strong, secure and silent seat stops; unusually large, posture-comfort seats; fully covered safety hinges; and quiet, quick and easy folding action are just some of the many features built into Krueger's exacting engineering standards.

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6-inch built-up frame strengtheners — seat spacers provide more rigid bearings at seat pivot point — prevents frame spreading.



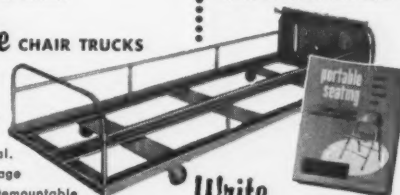
Spot-welded steel seat stops capped with rubber bumpers assure positive seat lock — quiet operation when opening or folding chair.



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as were born in 1936." No one can question the wisdom of looking ahead under these circumstances.

First things first

► The elementary and secondary schoolmen, who must somehow arrange for 12 years of education for these largest annual crops of American babies born since 1951, are worried. It will be from 12 to 17 years before they are "beyond the high school." Schoolmen notice the almost immediate emphasis of the committee on the

financial rôle of the federal government and wonder what this means for elementary and secondary education.

There have been many billions of federal dollars spent in colleges and universities in recent years. Present research contracts and other federal subsidies make some institutions almost branches of the federal government, because there is direct federal-local dealing which lacks the built-in protections against federal control of education happily present in the state systems of public education. The superior public relations facilities in

higher education and the vast interchange of personnel between the government and the institutions may easily lead to further expansion of the already huge federal funds for higher education. In short, citizens and schoolmen are concerned that a peculiar brand of educational escapism may place the prospective needs of 1970 above the critical needs of 1957. As a practical matter, Congress is unlikely to care for its share of both problems at the same time.

I believe the public will be inclined to insist that first things come first and that the crisis in elementary and secondary school financing will be given fair consideration by the federal government. The committee would do well to recognize explicitly in its next report that the scope and quality of education beyond the high school in its emphasized year of 1970 depends largely upon the quality of elementary and secondary education between 1957 and 1969.

Test for desegregation

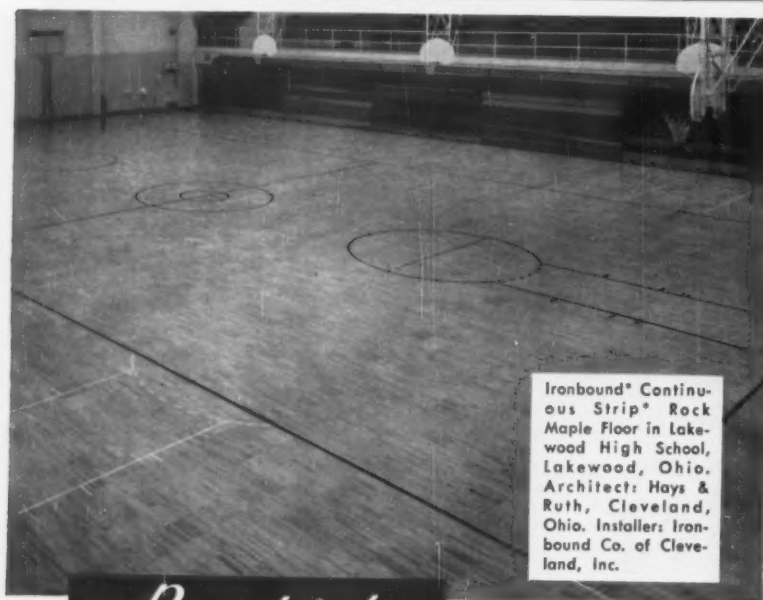
► On the last day of 1956 Chief Judge John J. Parker of South Carolina, speaking for the U.S. Circuit Court of Appeals at Baltimore, affirmed the decisions of lower federal courts ordering the public school authorities of the city of Charlottesville and Arlington County, Virginia, to proceed with desegregation.

The injunction applies on January 31 to all public school grades in Charlottesville, where about 23 per cent of the pupils are Negroes. In Arlington, where about 6 per cent are Negroes, it applies to elementary schools on January 31, and to high schools next September. Enforcement will be delayed pending appeal to the U.S. Supreme Court, where reversal is highly unlikely.

The exact terms of the court injunction are both interesting and important. They enjoin the defendants "... from refusing on account of race or color to admit to, or enroll or educate in, any school under their operation, control, direction, or supervision any child otherwise qualified for admission to, and enrollment and education, in such school."

The circuit court also approved the following language from the lower court:

"The foregoing injunction shall not be construed as nullifying any state or local rules, now in force or hereafter promulgated, for the assignment of



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When the school board saw it they exclaimed, "just like you said it would be . . . more beautiful than we thought it could be." Same old story, it happens again and again, practically every time an architect specifies an Ironbound* Continuous Strip* Hard Maple Floor.

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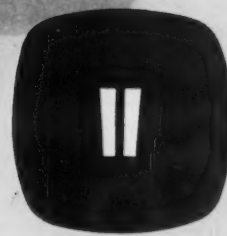
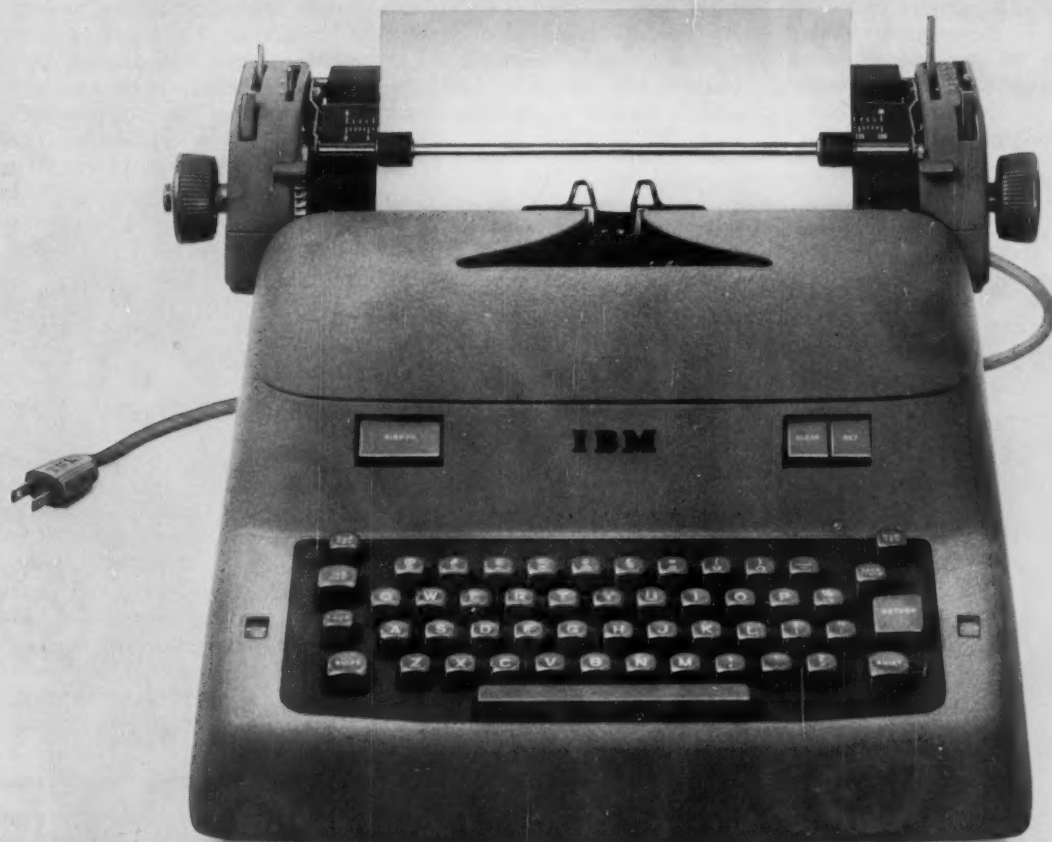
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children to classes, courses of study, or schools, so long as such rules or assignments are not based upon race or color; nor, in the event of a complaint hereafter made by a child as to any such rule or assignment, shall said injunction be construed as relieving such child of the duty of first fully pursuing any administrative remedy now or hereafter provided by the defendants or by the commonwealth of Virginia for the hearing and decision of such complaint before applying to this court for a decision on whether any such rule violates said injunction."

"It must be remembered that the decisions of the Supreme Court . . . do not compel the mixing of the different races in the public schools. No general reshuffling of the pupils in any school system has been commanded. The order of the court is simply that no child shall be denied admission to a school on the basis of race or color. Indeed, just so a child is not through any form of compulsion or pressure required to stay in a certain school, or denied transfer to another school, because of his race or color, the school heads may allow the pupil, whether

white or Negro, to go to the same school as he would have attended in the absence of the ruling of the Supreme Court. Consequently, compliance with that ruling may well not necessitate such extensive changes in the school system as some anticipate."

As this is written a recently authorized three-member state pupil placement board is preparing to hold its first meeting. This board has authority under Virginia law to assign pupils to all public schools in the state, and no local board of education now has such authority. It seems likely that any contempt proceedings growing out of these cases will be brought against the state pupil placement board rather than against the local boards of education.

The great battle developing between the U.S. Supreme Court and the commonwealth of Virginia is high legal drama, in which the capacity of the law to adapt itself to practical conditions is being illustrated. In the zig-zag course that constitutional law usually follows on major controversial issues, gradual desegregation will take place. The judicial system, however, has built-in procedures which permit adherence to the principles enunciated by the Supreme Court without unnecessary violence to the majorities of citizens in some communities and states. Rarely has there been a better illustration of the social genius of our law than the circuit court decision in Virginia.

Driver training increases

► The committee on highway safety of the Governors' Conference has recommended that every state shall immediately "promote the offering in high schools of comprehensive traffic and driver education courses, including behind-the-wheel training, and consider the desirability of requiring, after a sufficient time, that all young drivers present evidence of their having completed an approved driver course."

To the horror of academicians, who often use driver training to illustrate waste of school time, citizens have been agreeing with such organizations as the N.E.A. Safety Commission, the American Automobile Association, and the National Safety Council that the schools should emphasize it more.

The general interest of citizens in safe driving has resulted in driver training programs in thousands of high schools throughout the country. It has also led to special state appropriations for driver training in seven states since 1947—four in 1955.

New 1,450-pupil Senior High School and City Hall
Passaic, N. J. Kelly & Gruzen, Architect-Engineers



Locker Protection by DUDLEY

This school building received one of the five top awards in the 1955 Competition for Better School Design. Not only is it united with the new City Hall, but the two buildings, with the existing Forstman Library at the lower right, also form a civic center. City Hall is at the upper right. Lockers in the new school are protected by 1,400 master-keyed P-570 Dudley Padlocks, and 1,433 master-keyed, built-in S-540 Locks.



Locker Problems?

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The Dudley representative in your area will gladly work with you to solve problems of locker administration and control. This expert counsel is an exclusive Dudley service, available to you without cost or obligation of any kind.

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Solid stainless steel case, revolving dial with 64,000 possible 3-number combinations. Self-locking when shackle is pushed home.



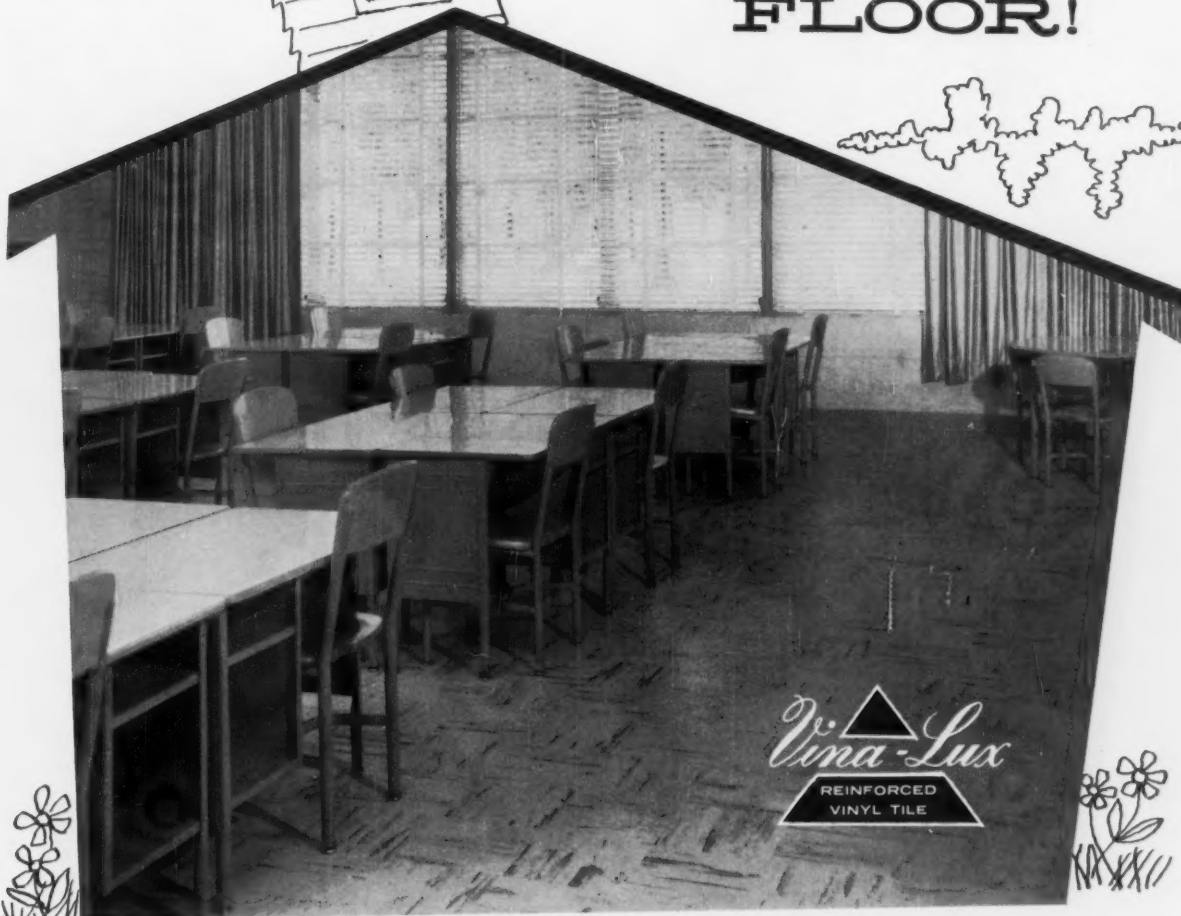
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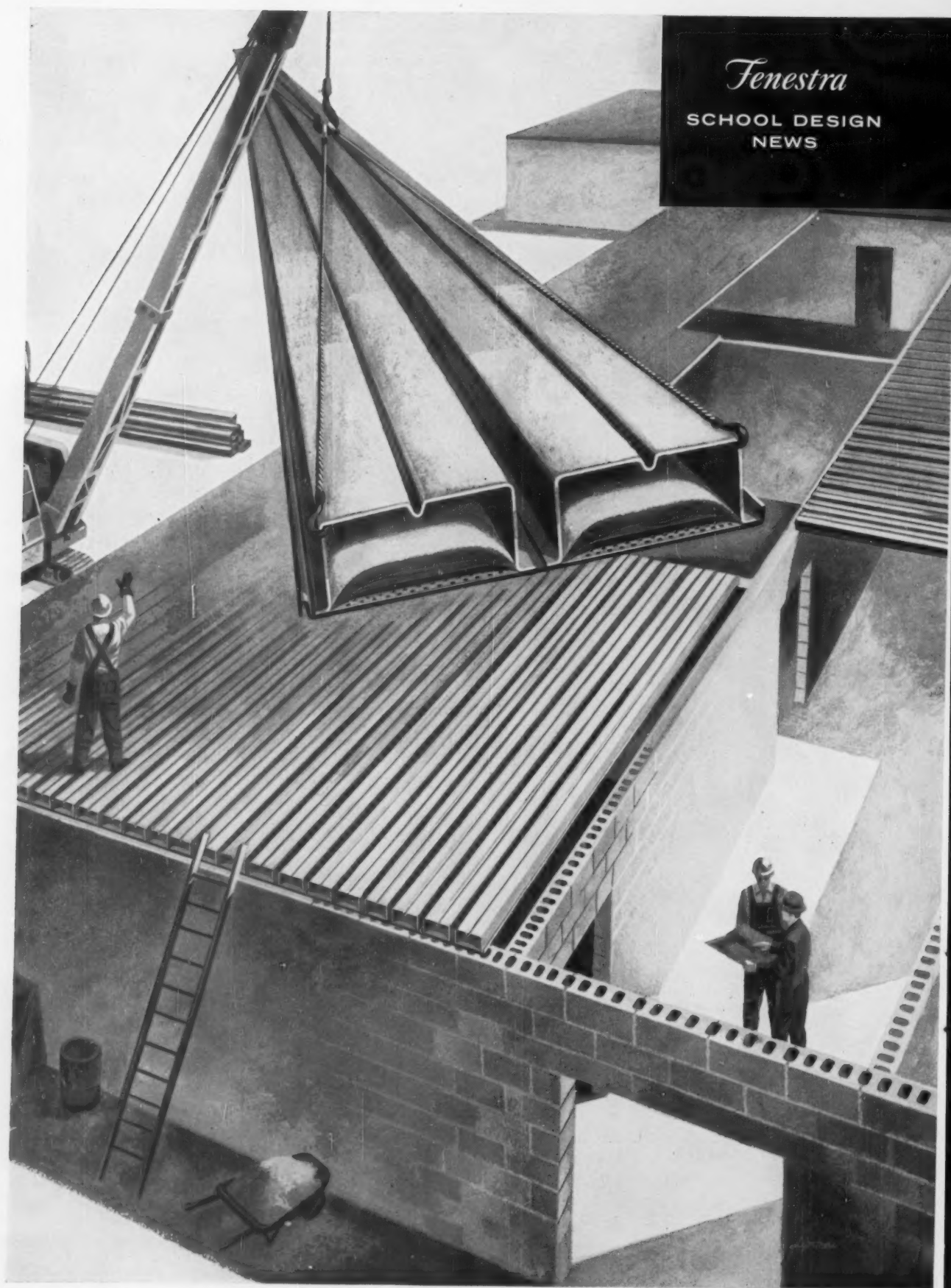
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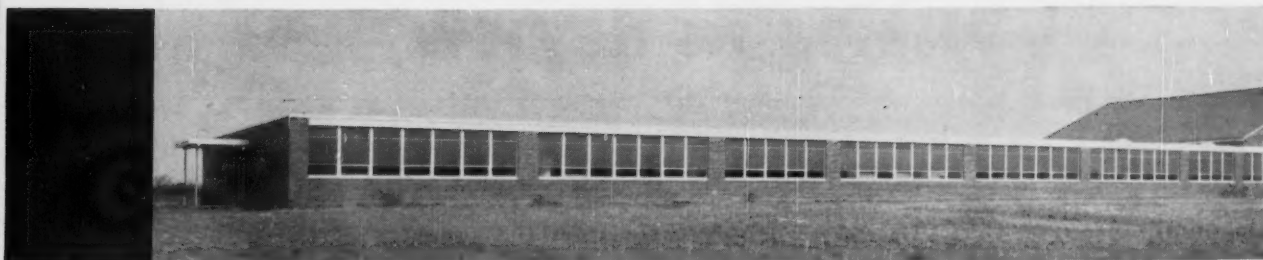
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Fenestra

SCHOOL DESIGN
NEWS





Fowlerville High School, Fowlerville, Michigan, is designed with interior load-bearing masonry walls and Fenestra Acoustical-Structural "D" Panels to reduce structural steel requirements to a minimum. Total costs for this 41,000 square foot school were approximately \$11.00 per square foot . . . an economical

figure for high school construction in this area.

Architect: Louis C. Kingscott and Associates, Inc., Kalamazoo, Michigan.

Contractor: Vandenburg Construction Co., East Lansing, Michigan.

How Fenestra Acoustical-Structural Building Panels*

SAVE STRUCTURAL STEEL IN SCHOOL CONSTRUCTION

Spanning between interior masonry bearing walls, Fenestra Panels practically eliminate structural steel and reduce foundation and footing requirements. Schools using this basic structural system have been built in many different areas at costs from \$9.00 to \$12.00 per square foot depending on mechanical facilities, interior trim and accessories.

Fenestra Acoustical-Structural Building Panels form the structural roof deck and the finished interior ceiling complete with "built-in" acoustical treatment. They replace *five* different materials—usually requiring extra labor and costs—with *one* building unit, erected in *one* operation by only *one* trade.

The unique cellular design of Fenestra Building Panels makes them strong enough to span up to 31 feet under normal roof loads. They also provide lateral bracing for the bearing walls. Their width—24 inches—fits perfectly with modular design techniques. This speeds up construction and eliminates cutting and fitting of panels and other materials on the job.

To provide the acoustical ceiling, the flat bottom

surface of the panels is perforated. An exclusive Fenestra arched, sound-absorbing batt that produces a noise reduction coefficient of 80% is enclosed *inside the panels*. It cannot be harmed by painting or maintenance cleaning. There is no "stuck on" material to discolor or fall off and require replacement. And, because this plate is a part of the structural panels, it is made of 16-gauge steel—4 times thicker than the usual metal pan ceiling construction. This assures extra resistance to damage by objects thrown against the ceiling or other impacts. Room-to-room noise flow is prevented by sound transmission barriers incorporated into the panel design.

If you are now planning a new school building, you should get complete details on Fenestra Acoustical-Structural Building Panels and the new school design concepts possible with them. The New 1957 Fenestra Building Panel Catalog gives you complete information. Mail the coupon below, today, for your **FREE** copy or call your Fenestra representative.



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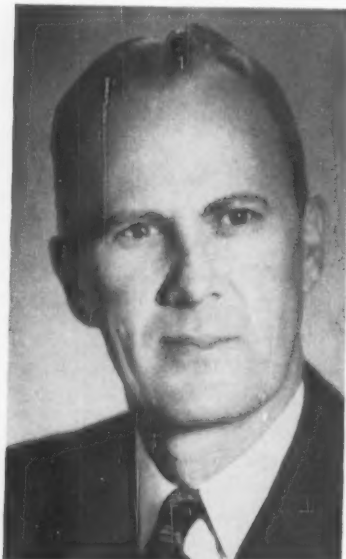
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NEWS IN REVIEW

C. C. Trillingham to Head A.A.S.A. in 1957-58

WASHINGTON, D.C. — C. C. Trillingham has been named president-elect of the American Association of School Administrators for the 1957-58 term. Dr. Trillingham, superintendent for Los Angeles County schools, will



C. C. Trillingham

succeed Philip J. Hickey, superintendent of instruction, St. Louis, who takes office as A.A.S.A. president March 15.

The election of J. Chester Swanson, superintendent at Oklahoma City, Okla., as vice president and of Wendell Godwin, superintendent at Topeka, Kan., as member of executive committee was also announced.

Dr. Trillingham joined the Los Angeles County schools in 1934 as assistant superintendent and has headed that system since 1942. Before that time

he had served as teacher, principal and superintendent in Kansas schools. Dr. Trillingham is chairman of the 1957 A.A.S.A. yearbook commission and has been a member of the editorial board of *The NATION'S SCHOOLS* since 1947.

Dr. Swanson, who has held his Oklahoma post since 1949, was a consultant to the White House Conference on Education and served as chairman of the 1956 A.A.S.A. yearbook commission. Mr. Godwin, the president of the Kansas Association of City School Superintendents, has headed Topeka schools since 1951.

Better Administration Goal of 10 Year Nationwide Project

NEW YORK. — A 10 year nationwide project aimed at improving the quality and effectiveness of public school administration has been initiated. Thirty-two leading universities across the country will cooperate in the program, which will cost an estimated \$10 million.

To be known as the National Council of Administrative Leadership, the project will be an inter-university association of distinguished scholars and authorities in educational administration. It is underwritten by an initial grant of \$400,000 from the W. K. Kellogg Foundation.

Daniel R. Davies, professor of education at Teachers College, Columbia University, will direct the project. Council headquarters are at Teachers College.

The council has outlined these preliminary goals for its program: to help raise the administration of education to the level of statesmanship; to improve the recruitment and selection of students for executive positions in

education; to improve basic instruction for these positions; to help professional schools to meet modern needs; to guide the professional development of the working administrator.

Among the council's first projects will be a nationwide study, in cooperation with the Educational Testing Service, on how to judge good administration in education. This study will cost \$500,000 and will take five years.

Fund and Ford Foundation Combine Education Activities

NEW YORK.—Activities of the Ford Foundation in the field of education have been combined with those of the Fund for the Advancement of Education. The consolidation of the two programs became effective January 1.

The action, approved by the trustees of the Fund and the Foundation, is aimed at giving more effective help to education in dealing with its current problems, according to Henry T. Heald, Foundation president.

Clarence H. Faust, president of the Fund, will become a vice president of the Foundation and will continue as president of the Fund during the period of expenditure of the remainder of the \$25 million granted to the Fund by the Foundation in April 1954.

More than four-fifths of the Foundation's expenditures, now nearing the \$1 billion mark, have been invested in educational improvement, directly or indirectly. About 70 per cent of the Fund's expenditures to date has been spent on the improvement of teaching.

Weekly U.N. Review Series Now on Educational TV

ANN ARBOR, MICH. — A week-by-week analysis of United Nations activities in kinescope form is now being distributed to educational TV stations. Entitled "United Nations Review" the programs feature interviews with key U.N. leaders and discussions of critical issues by Charles B. Lynch, Canadian Broadcasting Corporation correspondent.

The series is distributed by the Educational Television and Radio Center here. It is scheduled to run 18 weeks through March 11.



Left: J. Chester Swanson, superintendent at Oklahoma City, Okla., is the new vice president of the A.A.S.A.

Right: Wendell Godwin, superintendent at Topeka, Kan., is a member of A.A.S.A.'s executive committee.



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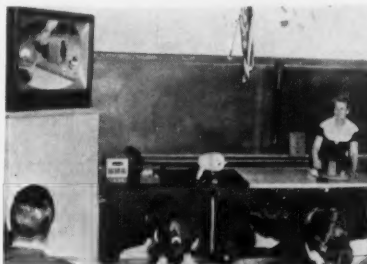
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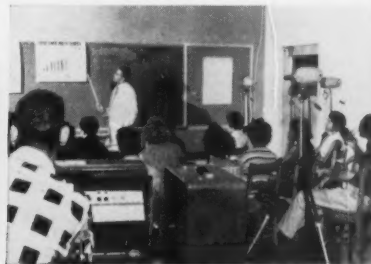
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Basic GPL *ii-TV* system; finest, most dependable ever produced, costs less than medium-priced car. Switching unit to select views from different cameras can be added.



GPL TV Projector is used for large group viewing of closed-circuit TV programs or off-the-air broadcasts. Pictures are 300% brighter than any other portable projector's.

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School Superintendents or Principals: For further details, or a demonstration in your own schools by local GPL representative, write to Mr. Norman Wicks, Manager, Institutional Television, General Precision Laboratory Incorporated, 61 Bedford Road, Pleasantville, N. Y.

*GPL's industrial-institutional TV system.

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BOOTH 27-31



General Precision Laboratory Incorporated

Expect Record Attendance of More Than 19,000 at A.A.S.A.'s 83d Convention at Atlantic City

WASHINGTON, D.C. — More than 19,000 administrators from large and small school systems in every part of the country will convene in Atlantic City, N.J., starting February 15 for a six-day examination of education's most crucial issues. This 83d annual convention of the American Association of School Administrators is expected to be the largest gathering of school superintendents ever to meet in one place.

Headline speakers at the general sessions and at specialized group meetings include Lawrence G. Derthick, U.S. Commissioner of Education; John F. Kennedy, U.S. senator from Massachusetts; Beardsley Ruml, tax expert and economist; Norman Cousins, editor of the *Saturday Review*; You Chan Yang, Korean ambassador to the United States; Earl J. McGrath, executive officer, Institute of Higher Education, Teachers College, Columbia University, and M. F. Ashley Montagu, anthropologist.

Paul Misner, A.A.S.A. president and superintendent at Glencoe, Ill., has announced plans for the first large-scale demonstration of teaching by TV before a major educational group. Convention participants will watch, via closed circuit TV, kinescopes of teachers in the actual process of teaching before the cameras. Monitor sets located in several rooms throughout the Atlantic City auditorium will pick up the pictures, and approximately 100 persons in each room will watch the demonstration simultaneously.

A total of 569 workshops, discussion groups, general sessions, and breakfast, lunch and dinner meetings are scheduled to bring delegates up to date on such pressing problems as the teaching of science, handling gifted and disturbed children, merit rating for teachers, desegregation and juvenile delinquency.

The annual Golden Key Awards for "distinguished service in the improvement of education" will be presented at a platform ceremony to Gen. Maxwell B. Taylor, U.S. Army chief of staff, and Beardsley Ruml. The former teachers of the two men will similarly be honored. The presentation is scheduled for 8:30 p.m. February 16. William G. Carr, N.E.A. executive secretary, will be the principal speaker.

Other highlights of the convention include 450 exhibits of products rang-

ing from school buses to pen points and the school building architectural exhibit. The latter is jointly sponsored by A.A.S.A. and the American Institute of Architects.

Approximately 60 allied and affiliated groups will hold simultaneous or overlapping meetings.

Dispute Payment for Health Services in Parochial School

BRONXVILLE, N.Y.—The adjacent communities of Yonkers, Mount Vernon, and Eastchester have been ordered by the state to pay for health services given to their children at a parochial school here.

Commissioner James E. Allen issued the order in accordance with a 1953 state law which requires home districts to pay for health services for children attending parochial or other nonpublic schools outside those districts.

Medical and nursing personnel hired by the board of education is assigned to administer health services in such schools.

Mount Vernon, defending its failure to reimburse Bronxville for the school years 1954-55 and 1955-56, challenged the constitutionality of the amendment and stated that the city had not entered into a contract with Bronxville for health services.

Commissioner Allen declined to comment on constitutionality, suggesting that the issue might be taken to court. However, he said no district had the legal right to deprive children of health services by failure to act, regardless of the existence of a contract.

Federal Judge's Decision Defers Dallas Integration

DALLAS, TEX.—A federal district judge has ruled that schools here should not be integrated immediately. Dismissing the suit of 19 Negro children who sought entry to white schools, Judge William H. Atwell criticized the Supreme Court for its decision outlawing segregation in public schools.

He stated that the Supreme Court ruling is not based on law, but on "modern psychological knowledge." He dismissed the suit specifically on the grounds that the school board should be given ample time to work out the problem of integration.

A Course Is Chosen

D. J. Brittain Jr., principal of Clinton High School, Clinton, Tenn., gave this explanation of his firm stand against recent pro-segregation demonstrations in the school:

"I can't find that I have any ideology or philosophy about integration *versus* segregation. I don't see an expression there for me.

"But there is the law of the land. I try to take the view that there is a white child in this group, and a white child in that group, and a Negro child in another group, and they must all be held to the same yardsticks of conduct without discrimination. I guess it is simply there that I stand."

N.E.A. Offers Federal Aid Plan; Hits Anti-Segregation Rider

WASHINGTON, D.C. — A system combining flat grants with equalizing grants to needy states has been suggested by the N.E.A. as a basis for distributing federal funds for school-house construction. The association also condemned the idea of an anti-segregation rider to the federal aid bill, stating that such an amendment would contradict the principle of federal aid without federal control.

These views were included in a five-point "statement of basic principles" on federal emergency school legislation. The statement, drawn up by the N.E.A.'s legislative commission, was adopted at the association's third annual policy making conference.

Legislation for children's welfare should be nonpartisan, the statement urged. It called for specific prohibition in the law against government "interference in the program, personnel, curriculum or administrative policy of the schools."

With specific reference to segregation, the policy said: "Legislation to enforce compliance with the decisions of the United States Supreme Court on the issue of segregation in the public schools contradicts the principle of federal aid without federal control. For this reason, compliance with the decision of the Supreme Court should be the responsibility of the lower courts in the manner described by the Supreme Court."

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Columbia Dean Offers Critique of Graduate Work

NEW YORK.—The dean of graduate faculties at Columbia University recently charged that the "time spent in making professional scholars is too long for the results achieved."

In his first annual report to the university's president, Jacques Barzun discussed the shortcomings of graduate instruction. "Instructors are required to do too much lecturing and students too much sitting and note taking," he said. "Both groups should do more independent work and come

together for periods of true tuition and apprenticeship.

"The research for master of arts or doctor of philosophy degrees is too often *re-search*," he said, "adding little or nothing to knowledge." Graduate study lacks the right instruction and facilities to give professional training for college teaching or for scholarly research.

Finally, Dr. Barzun noted that the system of combining specialties under the name of major and minor does not yield a true *course* of study. "As a result, it is a rare graduate student

who can be said to be an educated man."

These shortcomings are further accentuated by the fact that many graduate students cannot pursue full-time study because of economic pressures. Dr. Barzun urged that Columbia grant tuition exemption to scholarship and fellowship holders as a partial solution for the student who must support himself and perhaps a family in addition. At present, he pointed out, such students often decelerate their studies to the "point of absurdity."

College Freshmen Ask More Help in High School

NEW YORK.—Nearly half the freshmen entering college do not return for a second year. Two years ago, the committee on school and college relations of the Educational Records Bureau started a study to find out why.

In the study, "College Freshmen Speak Out," recently published by Harper & Brothers, 470 students in 27 of the nation's leading colleges and universities were interviewed. Giving their opinions on the problems of adjusting to college life, the students came up with some sharp criticisms of high school and college guidance programs and high school curriculums.

"Every high school should strengthen its work in such things as vocabulary, ability to read well and express yourself in writing, complete knowledge of term paper writing, how to take long tests and similar subjects. These aren't needed just in English but in every freshman course," stated one private preparatory school student.

This opinion was echoed by others who called on high schools to give more training in technics for college work such as library skills and ability to organize ideas and to carry out long-term assignments without constant supervision.

On the basis of its findings, the study recommended also that high school guidance programs be strengthened. Counselors should be provided with adequate training for precollege advice, and they should be given ample time to work with students in defining their individual aims and requirements. The schools should have extensive information about colleges for the use of students and counselors.

Many of those interviewed were critical of freshmen college courses,

(Continued on Page 146)

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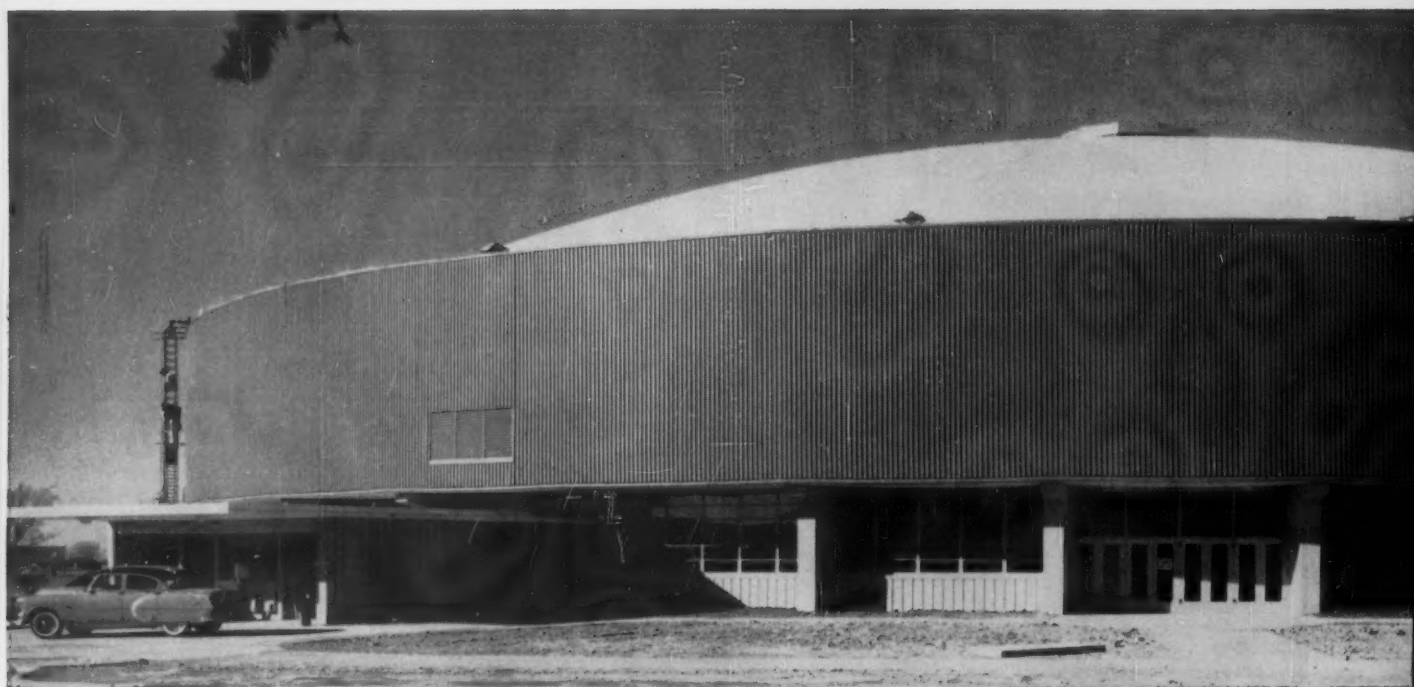
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University of Wichita field house features unique 267-foot diameter

THE ALL-WELDED, EXPOSED STRUCTURAL STEEL framework actually enhances the attractive interior of the building. The soffits of all trusses are painted a brilliant red which contrasts with the gray lead of the rest of the steel, emphasizing the diamond pattern.



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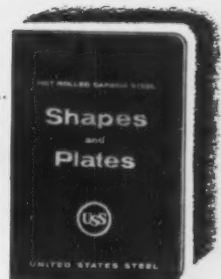
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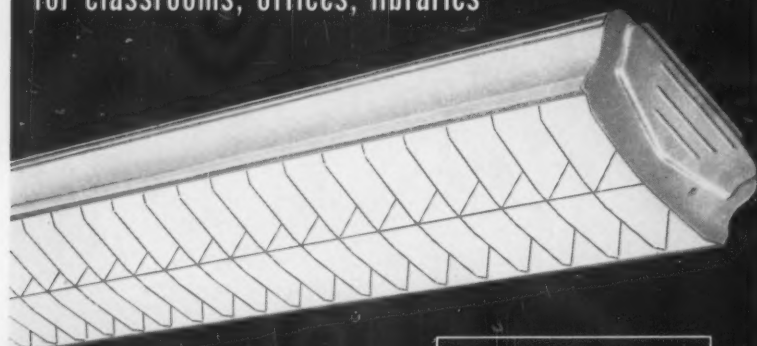
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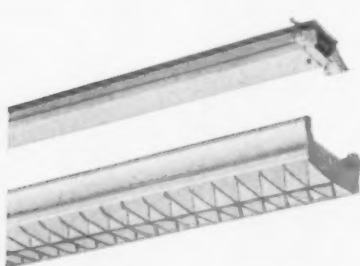


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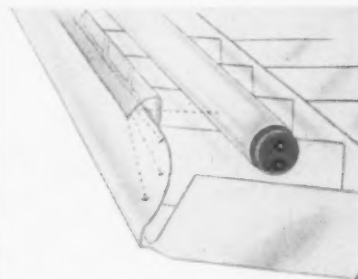
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(Continued From Page 142)

finding that their teachers lacked enthusiasm or ability and that their freshmen subjects were boring and uninspiring. On the basis of these comments, the study urged colleges and universities to give careful consideration to the assignment of faculty members to freshmen courses.

Subcommittee and School Board Disagree on Capital's Schools

WASHINGTON, D.C.—The majority report of a congressional subcommittee which investigated the public schools here has called for a return to segregated classes. The report was signed by four southern representatives; two northern Republican members of the subcommittee rejected its recommendations.

The Washington, D.C., Board of Education announced unanimous opposition to the "resegregation" proposal. Hobart Corning, superintendent, said a return to segregation would be illegal and impossible, as well as contrary to school board policy.

The report said that racial integration had impaired educational standards and caused appalling disciplinary difficulties and sex problems. The dissenting committee members charged that the majority of the committee had dealt with the "sordid headline details almost entirely."

The Washington Committee for the Public Schools, a 31 member group of civic leaders formed during the subcommittee hearings, also denounced the report as "negative and hostile."

Michigan to Require Driver Training for Teen Licenses

LANSING, MICH. — No drivers' licenses will be issued to Michigan young people under 18 unless they have passed an approved course in driver education, under provisions of a state law which becomes effective February 1.

Clair L. Taylor, state superintendent of public instruction, estimates that 105,000 boys and girls in the 15 year age group are directly affected. The law applies equally to those enrolled in public, private or parochial schools, and to those not in attendance at any school.

The law is being watched by every state, Dr. Taylor said. "Experts at Northwestern University's traffic institute have called it the greatest single step to meet the highway accident problem," he added.



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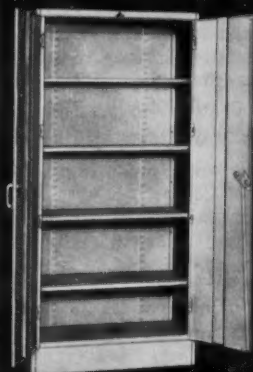
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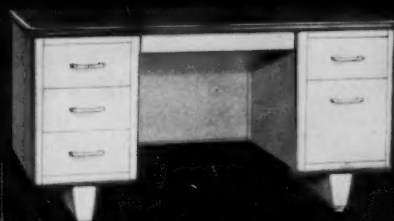
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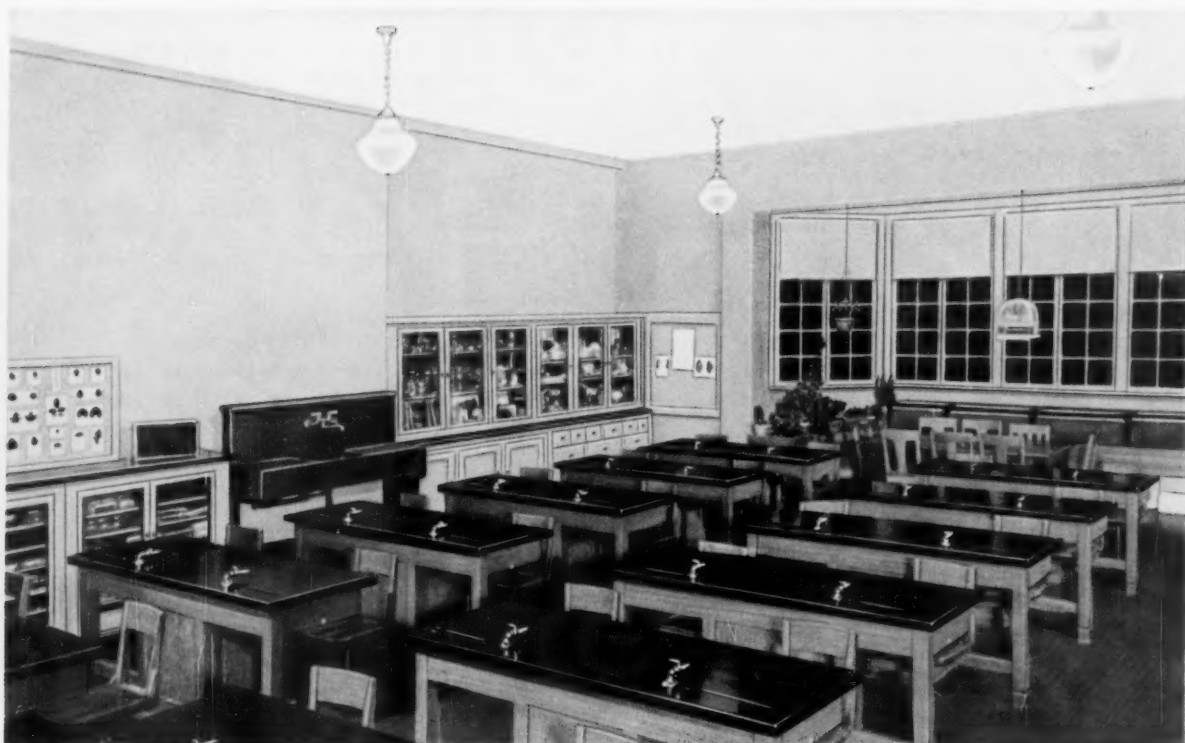
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Says I.Q. Test Inadequate for Identification of Gifted

EVANSTON, ILL.—It takes more than an intelligence test to identify many gifted children. Qualities of social leadership and creative abilities in music, art and writing are chiefly recognized in performance, a professor of education pointed out recently.

Paul Witty of Northwestern University emphasized the importance of providing many opportunities for children to express special abilities. Variety of opportunity is the best

means of identifying these talented youngsters, he said. Any child should be considered gifted whose performance in a valuable line of human activity is consistently remarkable.

As an example, Dr. Witty described the use of a symbolic and imaginative movie to determine creative writing ability in 2000 elementary school pupils. After seeing the film, which had no dialogue or narration, pupils were asked to write a story or poem to accompany it. The compositions were judged according to "genuine feeling"; sensitivity to

the value of particular words and phrases; a recognition of the filmmaker's intent and of the symbols presented, and correct use of English. About 10 per cent of the compositions were outstanding, suggesting potential writing ability.

Pupils gifted in science, Dr. Witty said, are typically characterized by high verbal ability, high mathematical ability, and superiority in various aspects of science which may be determined by tests. But, he added, they are also characterized by "drive or determination to use their abilities as well as by a searching, inquiring attitude."

Dr. Witty spoke before the annual conference of the American Association for the Advancement of Science in New York.

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Report 198 TV Stations Carrying Educational Series

WASHINGTON, D.C. — The U.S. Office of Education has reported that 198 commercial television stations in this country are carrying a total of 531 educational program series.

The 198 stations, situated in 144 cities, are those that replied to a U.S.O.E. questionnaire, sent to the 511 stations now on the air. The survey showed that the 531 programs are sponsored by eight state departments of education, 15 county school systems, 160 colleges and universities, 13 teachers colleges, 67 public school systems, and five parochial school systems.

The survey included neither educational programs carried on networks nor those carried by the strictly educational television stations on reserved channels.

Promotes High Standards for Educational Secretaries

WASHINGTON, D.C.—A plan to encourage high standards of preparation for educational secretaries has been adopted by the National Association of Educational Secretaries. To be known as the Professional Standards Program, the plan calls for certificates of recognition to be awarded on the basis of experience, education and professional activities.

Six testing centers have been set up at schools and universities across the country where N.A.E.S. members may take examinations to qualify for recognition certificates. The first examinations are scheduled tentatively for May 10 and 11.

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Mental Health May Suffer If Child Changes Schools Often

COLUMBUS, OHIO. — Frequent changes in schools can be an important factor adversely affecting a student's mental health, an Ohio State University research team reports. The team also named unhappy family life and isolation from well organized community groups as significant factors affecting emotional stability.

A. R. Mangus of Ohio State University's institute of child development and family life and E. Z. Dager of Purdue University are co-authors of the report.

Of a group of 384 public school pupils first tested in 1946 at the age of 9 and retested in 1955, 8.6 per cent moved downward to "significantly lower levels of mental health," the sociologists said.

Students who make repeated changes in schools are subject to great risks of adverse personality change, while the "non-mobile" have increased chances of changing in the direction of mental health. A break or threatened break in the family of an adolescent or pre-adolescent poses a major threat to his personality organization, the report said.

California Study Shows Trend Toward District Unification

BERKELEY, CALIF.—Tradition, law and public opinion are the major forces retarding school district unification in California, according to a recent study issued by the California State Department of Education. Despite these factors, the trend is toward unification rather than separately organized elementary and high school districts, the report states.

California has more separately organized and administered elementary and high school districts than any other state; less than 5 per cent are unified under the administration of one board and one superintendent and financed through one budget.

The report recommends that laws and regulations be changed so that uneconomical districts will not be perpetuated for legal and financial reasons. In addition, these questions must be satisfactorily answered before unification can be speeded up: (1) To what extent has district unification resulted in loss, reduction or increase of local responsibility and control of the schools? (2) Does unification bring schools closer to the people in

a district? (3) To what extent does the present system of state support provide financial rewards that discourage reorganization or unification? (4) How can undesirable unifications be avoided? (5) To what extent does the present system of separate organization make education more costly?

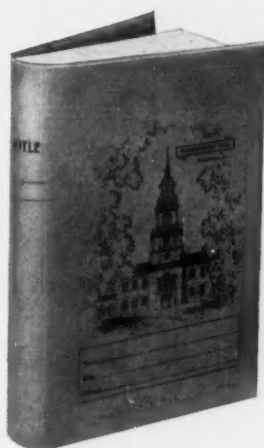
Philadelphia High School Students to Study Communism

PHILADELPHIA. — High school students in Pennsylvania will study the dangers of communism in a special course to be inaugurated next fall,

Charles E. Boehm, state superintendent of public instruction, has announced.

The course will be taught in 11th and 12th grades and will consist of a one or two week unit of social studies. Dr. Boehm said that teachers, while emphasizing the positive side of democracy, had not discussed the faults of ideologies such as communism for "fear of becoming involved in controversy."

Dr. Boehm said he decided to inaugurate the course of study after the American Legion pledged its support.



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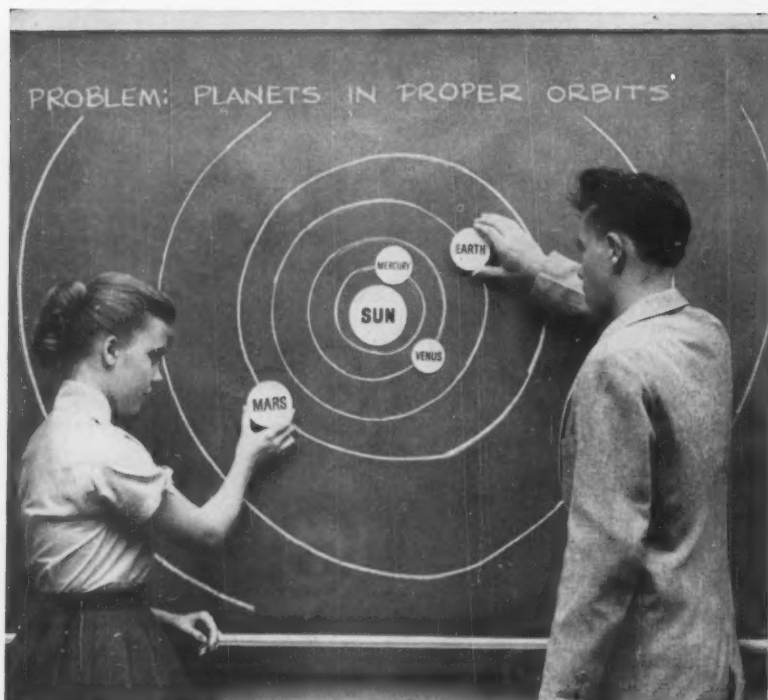
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Law Professors Differ on Teachers Unions, Strikes

NEW YORK.—Teachers have "no alternative" to organized action if they are to obtain better working conditions, a law professor told public school administrators at a school law conference here.

James P. Gifford, associate professor of law, Columbia University, also supported the right of teachers to strike under certain circumstances—such as when they are "confronted with a breach of agreement or refusal to negotiate."

Taking the opposite point of view was Robert R. Hamilton, dean of the University of Wyoming's law school. Dr. Hamilton said he was against teachers striking and noted that teachers are becoming increasingly more strike and union minded. "Much better treatment of teachers is essential if unionization of the profession is to be avoided," he said. "There's going to have to be a new device developed for protection of both the teachers and the public."

"No" Votes Smother Plan to Construct Teacher Apartments

PARK RIDGE, ILL.—The widely considered plan of making teaching positions more attractive by way of school initiated teacher housing took a trouncing here during January. A referendum proposition to build a \$438,000 faculty apartment project was smothered by a vote of 6 to 1.

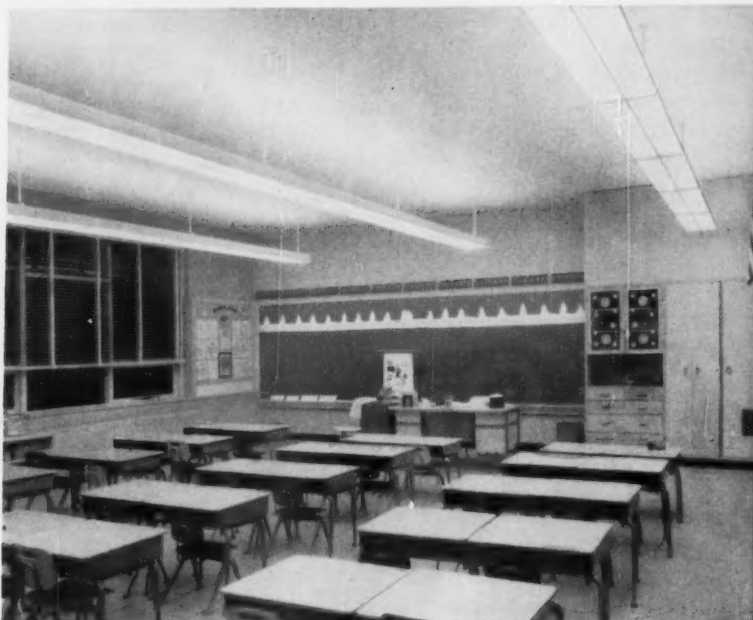
The proposal would have authorized the erection of a two-story brick structure for the teachers of Maine Township High School, which serves some 3600 students from Park Ridge and Des Plaines. It would have provided eight single and 32 double bedroom units, furnished, with general lounge and recreation facilities.

It was believed by the school administration that the construction would attract needed teachers to this area, where suitable housing has been scarce and where rentals on two-room apartments have ranged up to \$175 a month. Instructors during the two-year probationary period required to gain tenure at the school would have paid between \$85 and \$125. Thereafter they would have been expected to plan their own homes.

A combination of factors, tuned to the sensitivity of the community, contributed to the decisive defeat of the referendum, according to Supt. Harry D. Anderson, so that it is difficult to



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point out any specific clues as guides for future undertakings of this nature. Leading the opposition were local real estate interests who were quoted as condemning the project as "a socialistic step" toward government ownership of housing.

Dr. Anderson states that, in response to a questionnaire sent out in 1955 to the then 115 members of the teaching staff, 99 replied, with 96 expressing themselves in favor of the housing program. Since then the faculty has grown to 150, and local newspapers reported that the teachers more recently have been divided on the merit of the proposal. Some are said to have expressed a preference for living apart from their colleagues, others to have found the type of facilities not fully up to their expectations. Still other teachers feared that the building plan was a way of avoiding salary increases.

The public was told by builders that anticipated construction shortly would alleviate the housing shortage. Some members of a citizens advisory group at voting time expressed themselves as opposed. Certain newspapers failed to give support. In short, a united front could not be shown the public,

suggesting that, while the voting was not necessarily premature, continuation of the educational program was needed if the project was to succeed.

Will the indoctrination of the public be started all over again? Supt. Anderson says No. There are other needs directly related to school operation which the community will be asked to meet. Anyway, Dr. Anderson reports, efforts put forth may be expected to ease the teacher housing problems. Real estate people and the general public, he believes, have been sufficiently aroused to carry through on their promises to give teachers preferential consideration in new construction.

Clair Taylor to Accept Post With Michigan State University

LANSING, MICH. — Clair L. Taylor, state superintendent of public instruction for Michigan, has announced that he will not be a candidate for re-election when his second two-year term of office expires July 1. At that time he will join Michigan State University in an administrative post.

Mr. Taylor was deputy superintendent under the late Lee M. Thurston,

and was appointed to the state superintendency when Dr. Thurston became U.S. Commissioner of Education.

Urge Extensive Rezoning for Better Integration in New York

NEW YORK.—A master plan to bring about more integration in city schools here is under consideration by the board of education. Key to the proposed integration move is an extensive rezoning of school districts.

The subcommission on zoning which formulated the proposal asks that racial integration be made the cardinal objective of zoning. At the high school level, it recommends that high school population be distributed on the basis of the ethnic makeup of the over-all school population and that no high school student body be composed solely of one ethnic group.

Other recommendations include permissive zoning to provide the opportunity for children in a homogeneous area to attend a heterogeneous school and selective use of bus transportation so that children attending a homogeneous school may be transferred to under-utilized schools in other reasonably near-by areas.

Twenty-two civic, welfare, religious and educational groups have urged adoption of the subcommittee's recommendations, as well as recommendations of the teacher assignment subcommittee to change assignments, giving "difficult" schools a greater proportion of experienced teachers.

Union Asks State Income Tax to Meet School Finance Needs

CHICAGO. — The Chicago Teachers Union will urge adoption of a flat state income tax as the solution to problems of school financing in Illinois. The group will seek the support of both political parties and Gov. William Stratton to pass the tax in the next session of the Illinois General Assembly.

After long study, the union reached the conclusion that such a tax would be the only source of revenue adequate to meet school needs, said John Fewkes, president. With a hypothetical 1 per cent income tax, applied on the basis of 1953 U.S. Internal Revenue Service figures for Illinois, the returns would be \$165 million a year, he said, or \$65 million more than a 1 cent sales tax increase would bring in.

The union also said that an income tax is "much more equitable than the regressive sales tax."



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there's no waiting for slow-up machine operations. When you take a total, the cash drawer pops open and the receipt automatically spaces for removal. Turn a key, and your Burroughs automatically converts to an adding machine for miscellaneous figuring work. Burroughs cash registers are available in both hand and electric models.

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The Honeywell system also provides the economical means of controlling heat and ventilation for partial use of school facilities during the school day and by civic and com-

munity organizations at night.

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The School-Master is an exclusive Honeywell development designed for any school, new or old. No major building alterations are necessary as the wiring is simple. For more information on how the broad line of Honeywell temperature and ventilation controls can serve you, call your local Honeywell office or write to Honeywell, Dept. NS-2-39, Minneapolis 8, Minnesota.



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Need for Psychotherapy Cited by Columbia Psychologist

NEW YORK.—Many educators need psychological help, Everett Dakan of Teachers College, Columbia University, asserted recently. Dr. Dakan bases his opinion on his experience since 1950 as head of the college's psychological counseling staff.

"I want to make it clear, however," Dr. Dakan said, "that I am not implying that American educators are mentally sick as a group. Teachers, like anyone else, may suffer from *normal* problems of personal adjustment."

However, he said, these problems become more important because of the vital rôle played by the teacher in American society. Personality problems "can hinder not only the teacher's personal life, but also his ability to guide properly the intellectual growth of his pupils."

Dr. Dakan said that many Teachers College graduates had shown increased teaching productivity through psychotherapy. He explained that the counseling service was set up in 1950, partially in response to a student poll in which 96 per cent of the stu-

dents agreed there was need for some kind of psychological counseling for teachers.

More than 1200 teachers have been interviewed in the program. "We are primarily interested in identifying and explaining the problem, if there is one, to the individual," Dr. Dakan said. He estimated that this takes from one to 15 hours of consultation.

California Parochial Schools Win Tax Exemption

WASHINGTON, D.C. — The U.S. Supreme Court has upheld a California law which exempts parochial schools from property taxation. The law, passed in 1951, grants complete immunity from property taxation to "nonpublic, undercollegiate, sectarian schools."

Paul W. Heisey, a taxpayer of Oakland, Calif., challenged the law on the basis that it constituted a "tax exemption subsidy" that "overwhelmingly benefits the nonpublic schools of one sect in particular—the Roman Catholic Church." Catholic schools, he asserted, derive 88 per cent of the benefit from the law.

In dismissing the case "for want of a substantial federal question," the Supreme Court left standing the ruling of California's supreme court. A lower California court had ruled the law was unconstitutional.

Teens Show Mixed Feelings on Subject of Integrated Schools

LAFAYETTE, IND. — America's teenagers, like their elders, hold a diversity of opinion on the subject of integrated schools. A representative nationwide sampling of 10,000 young people quizzed by Purdue University's Opinion Panel reflected these attitudes:

Thirty per cent wholeheartedly approved of integrated education, and 12 per cent were equally definite in saying they didn't like the idea and wouldn't cooperate. On the other hand, 22 per cent said they would cooperate, although they didn't like it. Thirty-five per cent were undecided, with 30 per cent indicating they would probably approve and 5 per cent that they would probably disapprove.

In theory, twice as many teenagers believe that integration is necessary to a democratic nation as are in favor of attending an integrated school themselves.

The poll revealed that an individual's home background, religious preference, sex and region of the country

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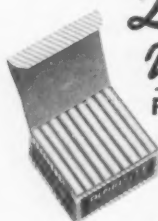
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have a strong influence on his attitudes toward segregation. Girls showed somewhat less prejudice than boys. Catholics are less opposed to integration than are Protestants or those of other religious faiths.

Urban high schoolers were more in favor of integration than rural students were. The higher the income of a teen-ager's family the less anti-Negro feeling he seemed to have. The better educated an adolescent's mother, the more he tends to approve of integrated schools and to be willing to attend them.

Sixty per cent of the adolescents believe that integration is inevitable as compared to 45 per cent of a group questioned in 1951. Today, only 16 per cent of the teen-agers believe that segregation will never be ended everywhere in the U.S., half the proportion who held a similar view five years ago.

Dual Plan Combines Schools With Other Public Buildings

NEW YORK.—Two new junior high schools here will share their sites with a library and a community center, respectively. By erecting two buildings on a single site and using a single plan to cover both units, the city will save "considerable money in construction and site costs," school officials announced.

Both the projects will be in heavily congested sections of Manhattan, and will have the additional advantage of keeping tenant relocation to an absolute minimum, while making the best use of available space.

The first project, now under construction in East Harlem, will incorporate Junior High School 45, planned for an enrollment of 1800 pupils, with a two-story recreation unit which will be located at the west end of the site. Total cost for the dual construction will be \$4.3 million.

The other project combines Junior High School 22 with a one-story branch library on an East Side location. The library will be the first in the city system to be placed back from the street on a grassy plot. This project will cost an estimated \$3.5 million.

Testing Device Liven's and Lightens School Tests

NEW YORK.—A cousin of the pin-ball machine has added excitement to examinations at Metropolitan Vocational High School here. Built by students, the device lights up the

(Continued on Page 160)



In Marblehead, Mass., Junior High School, Johns-Manville Fibretone ceilings effectively muffle disturbing noise. Architect: Kilham, Hopkins, Greeley and Brodie, Boston

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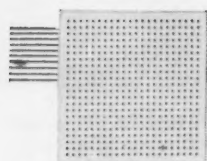
J-M Sanacoustic® Panels . . . perforated metal panels backed with a fire-proof, highly sound-absorbent element. The sanitary, white baked-enamel finish is easy to clean, may be repainted.

For a complete free survey by a J-M Acoustical Engineer, or for a free booklet, "Sound Control," write Johns-Manville, Box 158, Dept. NS, New York 16, N. Y. In Canada: 565 Lakeshore Road East, Port Credit, Ontario.

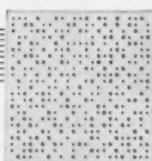
See "MEET THE PRESS" on NBC-TV, sponsored on alternate Sundays by Johns-Manville

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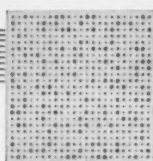
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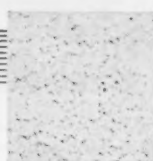
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Mrs. Cleo Maletis, personable Portland, Oregon housewife who last May 12 was named "Mrs. America," symbolizing the average American homemaker. Her selection over 48 other contestants as the 18th "Mrs. America" was based on her homemaking abilities.



Mrs. America, with her background as a home economist, studies the menu of the day with Manager Robert Ranck of Sky Chef, and head chef, John Tokarz.



The most important part of the meal naturally is the meat. Chef Tokarz' modern Gas range assures him the meat and the rest of the meal will be done exactly right, exactly on time.



The food goes right from the Gas ranges into these special serving dishes. This same delicious food is also making the Cleveland airport's restaurant famous.



Mrs. America agrees . . . the finest food served in flight is cooked with **GAS**

This is Mrs. America, 1956 . . . Mrs. Cleo Maletis from Portland, Oregon. Here at 10,000 feet in one of American Airline's Flagships, she knows the food she is being served will be hot and delicious, thanks to Sky Chef and its modern Gas kitchens.

For this flight between Cleveland and New York, the food was prepared at the new Cleveland Hopkins Airport. Fifteen minutes before flight time, the hot meals were transferred from the Magic Chef gas bake ovens and Vulcan gas ranges into warming ovens. Sky Chef serves nearly twelve million meals annually, from San

Diego to Boston, and all of them are cooked with Gas.

In Cleveland, Mrs. America inspected the Sky Chef facilities. She learned from Chef John Tokarz that the same gas equipment used to cook the meals served in flight also prepares hundreds of meals for daily visitors to the airport's main dining room. "It's the same everywhere," she added. "All the famous restaurants I've visited cook with gas . . . just as I do at home."

Mrs. America's right. If you would like to get the same outstanding results, call your Gas Company now. *American Gas Association.*



The serving dishes are then placed in these warming ovens, and taken to the plane. The food is always warm when the hostess is ready to serve the meal in flight. The menus are elaborate and change daily to satisfy the most demanding air commuter.



Final step. The number of passengers is checked, and the cold dishes are prepared. Mrs. America finds the entire process fascinating as she helps to load the trays—the first time one of American Airlines passengers has helped prepare her own meal!



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- Safety fuse prevents damage to projector socket and protects circuit fuse.
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GENERAL  ELECTRIC

(Continued From Page 156)

individual's test score only one second after he has completed an examination.

"Quizzo" is an automatic multiple-choice examination machine operated by a student. Beside each of 10 questions in a quiz is a dial which the student sets in one of four positions to record his answer. When all the dials have been set, the student presses a button that lights a number from zero to 100 for his score.

Morris Kunis, instructor in radio, electronics and television at the school, designed the machine and supervised the students' construction of it. Students like to take tests on the machine and consider them a game of skill, he said.

School Boards Association to Convene February 14

ATLANTIC CITY, N.J.—Some 2000 school board members and administrators are expected to attend the 17th annual convention of the National School Boards Association here February 14 to 16.

With the theme, "School Boards Build for the Future," delegates will discuss such subjects as federal aid to education, integration in public schools, the basis on which teachers should be promoted, and teacher qualifications.

English Voted "Most Useful Course" by G.E. Employees

NEW YORK. — English won top honors as the most valuable course of study in a recent survey of more than 13,000 employees of General Electric.

The employees, all college graduates, named English as most useful for success in business and for the enjoyment of leisure time. Surveyors found that engineering students voted English second only to mathematics as contributing to career success, while non-engineering employees placed it first.

N.B.C. to Give Instructional Programs to Educational TV

MIAMI BEACH, FLA.—N.B.C. will offer live programming to the nation's 22 educational TV stations over a period of 26 weeks in 1957. The plan was announced by Robert W. Sarnoff, N.B.C. president, at the corporation's 30th anniversary convention here.

The project, costing \$300,000, will prepare programs specifically for the educational stations, free of charge.

"These programs will be produced in our studios and furnished live to



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**"National Accounting Machines save us \$17,500 a year...
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the educational stations over our network lines," Mr. Sarnoff explained. The educational program will consist of three half-hour presentations each week, with instruction in mathematics, the humanities and government. The courses will run for two 13 week periods, one beginning in March and one in October.

The Educational Television and Radio Center at Ann Arbor, Mich., is supplying the local loops to connect the educational stations with N.B.C.'s network lines and is consult-

ing closely with N.B.C. on the design of the programs.

Survey Shows Eating Habits May Not Improve With Age

MAYWOOD, ILL. — A recent survey of the eating habits of freshmen and upperclassmen here showed that wisdom does not necessarily come with age—as far as nutrition is concerned.

In fact, the eating habits of the 117 upperclassmen compared somewhat unfavorably with those of the 75 freshmen. This was true despite the

fact that all the upperclassmen surveyed were taking foods and nutrition courses, which had not been offered to the freshmen.

The survey was made at Proviso Township High School, Maywood, Ill., by Sally McCauley and Sandra Dillard, student dietitians at Hines Hospital, under the direction of Martha Moffit, instructor in dietetics there.

For both groups, breakfast was the weakest meal of the day: 12 per cent of all the students ate no breakfast; 34 per cent ate a poor breakfast, and 54 per cent ate a good breakfast. In their responses, students placed the responsibility for poor breakfast habits on themselves, not their parents.

Here is a comparison of the breakfast habits of the two groups:

	Freshmen	Upperclassmen
Juice	48%	36%
Fruit	52	11
Cereal	33	23
Eggs	21	30
Toast	61	53
Beverage	66	41

At lunch time, only 50 per cent of the seniors reported that they ate in the school cafeteria, while 75 per cent of the freshmen did. Thirteen per cent of the upperclassmen ate lunch in restaurants, but none of the freshmen did. Lunches from home were brought by 37 per cent of the upperclassmen and 26 per cent of the freshmen.

The source of the lunch may have had some relationship to its content:

	Freshmen	Upperclassmen
Sandwiches	74%	36%
Fruit	42	18
Milk	80	54
Soft drink	6	23

For both groups, dinner was the most nutritious meal. Meat, potatoes, vegetables, salad and milk were included in at least 80 per cent of the diets, with one exception. Only 76 per cent of the freshmen ate salads, while 83 per cent of the upperclassmen did. Upperclassmen also made a better showing as vegetable eaters, with 98 per cent compared to 89 per cent of the freshmen.

Fifteen per cent of the freshmen and 18 per cent of the upperclassmen reported that they had gone on some kind of a diet at least once. The diets they listed included egg, starvation, salad and beverage, no breakfast, small lunch, and a diet consisting of 1200 calories a day.



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BUSES  EQUIP THEM WITH 4-WHEEL

BRAKES . . . TEST YOUR DRIVERS  . . .

COMPEL THEM TO OBSERVE ALL ROAD REGULATIONS. 

BUT STOP AND CONSIDER  THIS IMPORTANT POINT



what are you
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prevent
accidents at
the STEP?

Actuarial records prove that an inordinately large number of accidents occurs as students *step on or off* bus steps. You can reduce this hazard to a minimum with Rub-Bub Safety Step Plate on your bus steps.

Rub-Bub gives three-way protection against slips and falls. First—and most important—the contrasting white rubber edge attracts immediate attention to the step . . . Second, the resilient rubber provides a soft cushion . . . Third, the non-skid tread and “toothy” texture of the step tread is *never slippery wet or dry*.

Rub-Bub Step Plate is available on many leading school buses. Write Rub-Bub Safety Step Plate into your bus specifications—and you'll know you've done your best to protect your students.

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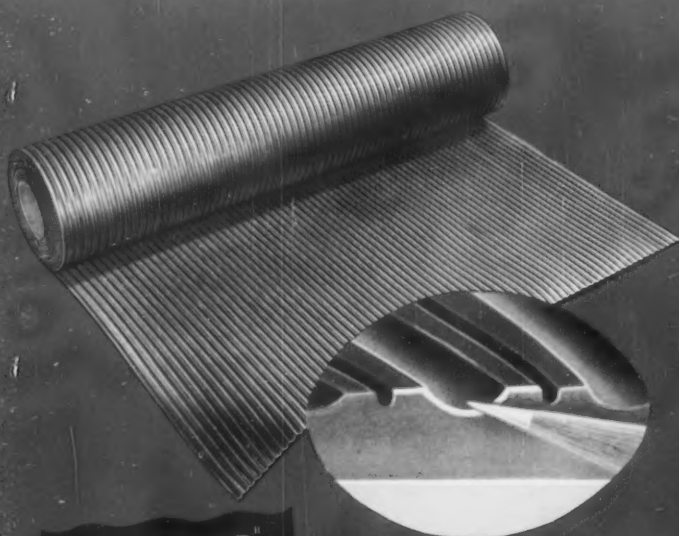
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School Buses



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Princeton Head Finds Unequal Equation in Course Credits

BRONX, N.Y. — High school students should not be receiving equal credit for courses such as band instruction and algebra, the president of Princeton University asserted recently. Playing in the school band or practicing drum majorette exercises cannot be equated educationally with the mastery of English, mathematics or a foreign language, and only a superficial academic accounting system would grant similar credit for these subjects, Harold W. Dodds stated.

While noting that there were numerous exceptions among the public schools, Dr. Dodds charged that too often the secondary school system in this country is not fulfilling its duty "to cultivate the instinct to think."

Motivation Key to New York Intensive Reading Experiment

NEW YORK.—"Learning how to" may not be as important as "wanting to" when it's a case of children and reading. Recent experiments in 14 fifth grade classes here seem to bear out the contention that narrow em-

phasis on the technics of reading may be putting the cart before the horse.

In the New York experiment, enjoyment of reading was the primary focus. Over an eight-month period, the fifth graders were surrounded with reading materials. Each class had an additional fifty to one hundred library books and an attractive library corner. Teachers did more reading aloud to their classes; stories were dramatized by the children and in puppet shows; more time was devoted to book reports, and buttons, banners and prizes were awarded to stimulate reading interest.

In addition, parents' cooperation was enlisted. The place of reading in the total school program was explained in parent-teacher conferences. Many parents joined libraries and set up library corners in their own homes.

At the end of the eight-month period, the average number of books read per pupil had jumped from 1.25 to 4.5. And these results were reported: (1) The children learned a love of reading; (2) the general reading ability of the children was improved; (3) the interests of the children were broadened and their taste

in literature was improved; (4) the children learned to use a library, and (5) parents were encouraged to purchase more and better books and were made aware of the importance of a home atmosphere conducive to reading.

The project, described in a 133 page booklet entitled "Bringing Children and Books Together," was sponsored by the Library Club of America.

Still a Bargain. Chicago's board of education has authorized a cost hike from 25 to 27 cents for Type A lunches in elementary schools and from 35 to 37 cents in high schools. In 1956, the school lunch program operated at a deficit of \$321,926, Supt. Benjamin C. Willis told the board.

Up North. The N.A.A.C.P. has asked that neighborhood school boundaries in Chicago be redrawn so that there is a better mixing of school population and that some Negro teachers be assigned to predominantly white schools. The group contends that white faculties for white children and Negro for Negro has been the pattern in Chicago.

(Continued on Page 166)

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DURACITE throughout at ALVERNO COLLEGE
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Chalkboard**

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No. 107—"Asbestocite," 1/4" Portland Cement and long fibre asbestos board.

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Also: Factory-built units, ready to hang.

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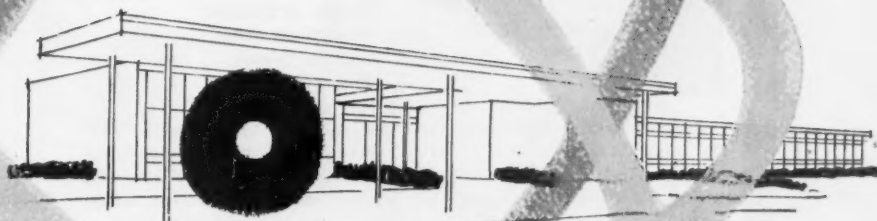
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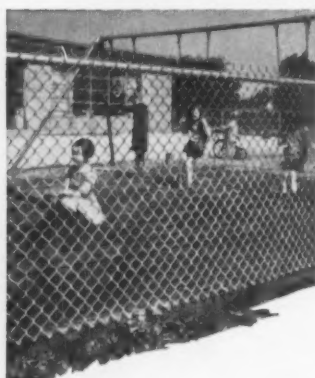
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(Continued From Page 163)

This Comes As No Surprise. School enrollment, from kindergarten through college, reached an all-time high of 39,353,000 in 1956, according to the U.S. Census Bureau. This figure represents an increase of 4.9 million over the total for 1953.

Our Changing Times. Parents called off a two-day strike and sent their children back to school at Bonita Springs, Fla., while pickets still carried placards protesting against a school principal and a teacher. The complaint: The principal could not enforce school regulations, and the teacher could not keep discipline in his classes.

Branching Out. Michigan State University has received a gift valued at \$10 million for the establishment of a branch college in Oakland County in the Detroit suburban area. Donors Mr. and Mrs. Alfred G. Wilson gave to the university their 1400 acre Meadow Brook estate and \$2 million.

High Fashion. New York's board of education awarded an \$8,765,000 contract, the highest single contract for a school building in its history, for the construction of the new Fashion Institute of Technology. The only school of its kind in the country, the institute is a community college, and half of its total cost will be paid by the state.

Not New, But Needed. Brotherhood Week will be observed February 17 to 24. Initiated as Brotherhood Day in 1934, the week has been observed annually since 1940 under the sponsorship of the National Conference of Christians and Jews.

ABOUT PEOPLE

CHANGES IN SUPERINTENDENCY

Dayton Shepherd to Regional School District No. 4, comprising the towns of Essex, Deep River and Chester, Conn. Mr. Shepherd was formerly a high school principal in that district.

Wayne Bray to Howard County, Kokomo, Ind., succeeding the late W. W. Lindley, Howard County superintendent for the last 19 years. Mr. Bray was formerly a high school principal in Carroll County, Indiana.

Austin E. Walker to the metropolitan school district of Warren Township, Indiana, effective February 1.

Memory Tape Controlled

TYPE GR SYNCHRONOUS MOTOR

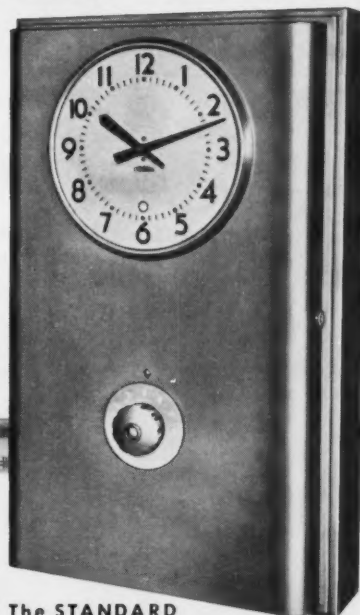
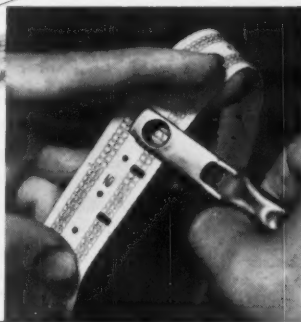
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Easy Does It!

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FLUSH MOUNTED
Square or Round

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Classroom buzzers mounted inside secondary clocks; corridor bells; gongs and horns for outside use.

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by Standard
WRITE TODAY FOR
Publication No. 241



Mr. Walker is superintendent of schools and high school principal at Crown Point, Ind.

Leonard L. White, acting superintendent at Blackwell, Okla., to superintendent there.

James A. Bernard to Hasbrouck Heights, N.J., from Easthampton, Mass.

Elmer J. McKechnie to the Berwick Joint Area School System, Berwick, Pa., succeeding the late **Kenneth L. Terry**. Mr. McKechnie was a member of the high school faculty at Berwick.

Waino H. Nelmark to acting superintendent at Chisholm, Minn., succeeding

the late **E. R. Steffensrud**, who had been associated with Chisholm schools since 1924. Mr. Nelmark formerly was coordinator of elementary education there.

Edward C. Manning to Supervisory Union No. 21, Hampton, Maine, from Supervisory Union No. 32, Livermore, Maine.

Arthur O. Horn to McKeesport, Pa., succeeding the late **Leo A. Travis**. Mr. Horn, former principal of McKeesport Technical High School, has been acting superintendent since Dr. Travis' death in September.

H. Edgar Riegler to Gettysburg Joint School District, Gettysburg, Pa., from the position of superintendent for Adams County, Gettysburg, succeeding **Lloyd C. Keefauver**.

Thomas C. Campbell, assistant superintendent of the Lakeview School System at St. Clair Shores, Mich., to superintendent there.

Eldon R. Crawford to the newly formed metropolitan school district of North Posey County, Wadesville, Ind., from the position of superintendent for Posey County, Mount Vernon, Ind.

Wayne Drexler to Dubuque County, Dubuque, Iowa. Mr. Drexler was principal at Farley, Iowa.

Gordon E. Peckham to Buckley, Mich., from Hersey, Mich., succeeding **Harold B. Nichols**, who is now superintendent at Lawrence, Mich.

Robert C. Wakefield to Antelope County, Neligh, Neb., from Oakdale, Neb., succeeding the late **Harry Hahlbeck**.

Walter G. Clifford to supervising principal for Hyde Park Central School District, Hyde Park, N.Y., from Canastota, N.Y.

Harvey D. Jensen to South St. Paul, Minn., from Winona, Minn.

Robert J. Durbin to Southeastern School District, Arcanum, Ohio, from Jackson School, Union City, Ind.

RESIGNED

LeRoy Pointer, superintendent at Big Springs, Neb.

Russell Borst, superintendent for Mecosta County, Big Rapids, Mich.

Paul C. Bryan, superintendent at Albany, Calif., effective in June.

Edwin F. McCooley, superintendent for Blackstone and Millville, Mass.

John M. Lumley, superintendent at Wilkes-Barre, Pa.

OTHER APPOINTMENTS

Floyd G. Parker, director of school building services for the Nebraska State Department of Education, to assistant professor of administrative and educational services at Michigan State University.

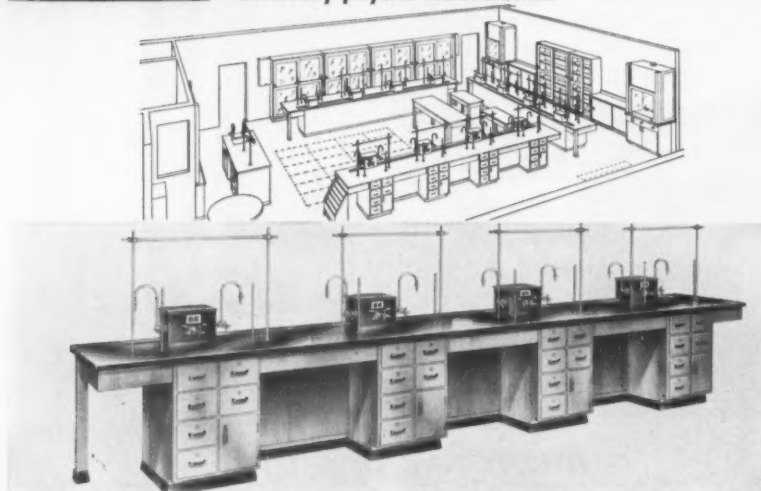
Walter N. Adamson, director of admissions and registration at Teachers College of Connecticut, New Britain, to senior research coordinator for the cooperative research program in the U.S. Office of Education.

Glenn T. Seaborg, Nobel laureate and professor of chemistry and chemical engineering at the University of

Overcrowded
Science
Rooms?

*Check into this Kewaunee
"Perimeter Planning" idea*

Here's another Kewaunee "Perimeter Planning" idea that "expands" existing space in combined chemistry-physics laboratories.



In this plan, three compact Kewaunee Pelton Science Tables are arranged around the room's perimeter and provide efficient working areas for 24 students. There is adequate space in the center of the room for tablet armchairs, demonstration area, special projects area and auxiliary demonstration area. And the instructor can observe all students without obstruction.

Kewaunee "Perimeter Planning" effectively utilizes every square foot of space to accommodate more students per class, more classes per day and at lower cost per student.

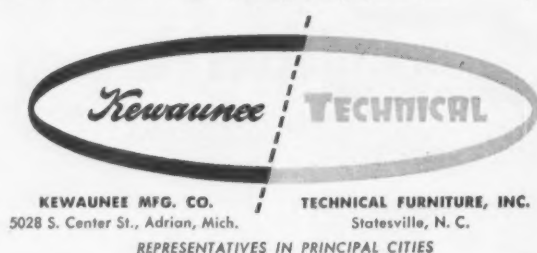
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AASSP, Washington, D.C., Space 102, 103

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Write for free 44-page catalog of Educational Laboratory Equipment; 48-page Plan Manual.



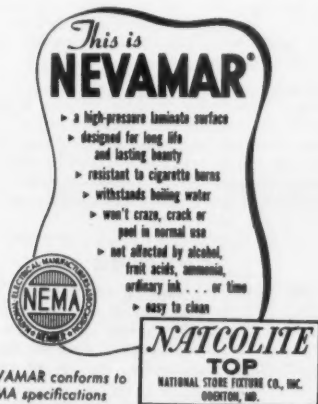
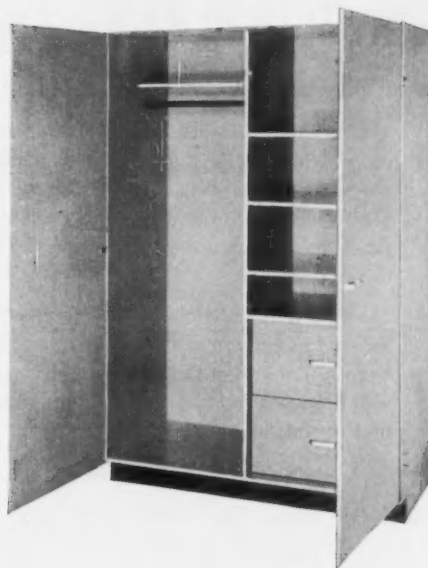


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*Illustrated are two of the cabinets in the National line:
(Above) the mobile drawer cabinet and (right) the teacher's storage cabinet.*



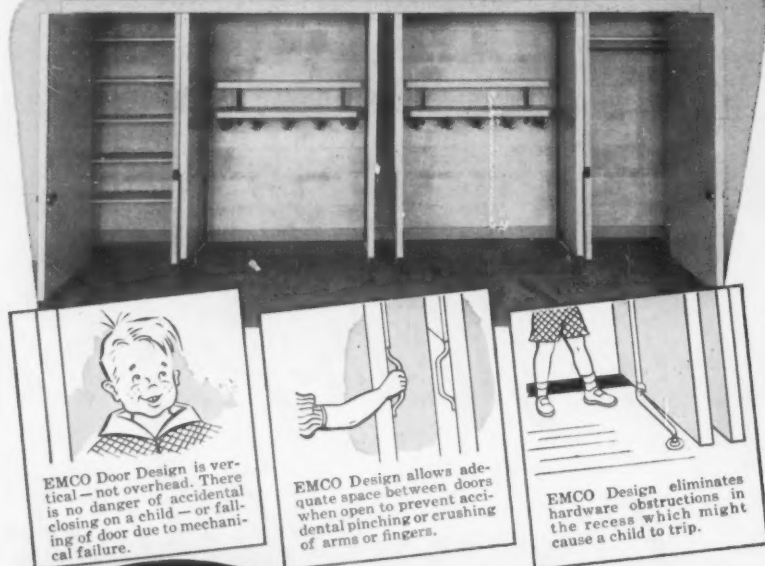
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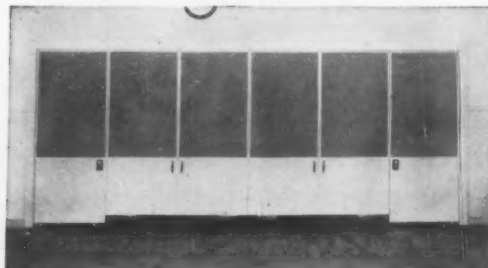


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California, Berkeley, to senior adviser in the sciences for the Educational Television and Radio Center, Ann Arbor, Mich.

Sidney Dorros to director of the division of publications, National Education Association, Washington, D.C. Mr. Dorros was formerly director of research and communications for the Maryland State Teachers Association, Baltimore. Earlier he had served as director of publications for that association.

DEATHS

John F. Conroy, 63, associate superintendent in charge of junior high schools for New York City. Mr. Conroy began his career as a teacher in New York schools and became successively assistant principal, principal and assistant superintendent in that system.

Ray H. Hamilton, 53, superintendent at Coleman, Mich.

THE BOOKSHELF

ADMINISTRATION

Handbook on California Cumulative Records. Bulletin of the California State Department of Education, Vol. XXV, No. 5. Pp. 30.

Teaching in America. Forty-third annual Schoolmen's Week proceedings. Edited by Frederick C. Gruber, associate professor of education, University of Pennsylvania. University of Pennsylvania Press, 3436 Walnut Street, Philadelphia 4. Pp. 239. \$2.

State Associations of School Administrators in the South. An evaluative study, based on research by R. Edgar Moore, dean, Athens College, Athens, Ala. Prepared by Harold P. Adams, associate professor of education and associate director, Bureau of School Service, University of Kentucky. Bulletin of the Bureau of School Service, College of Education, University of Kentucky, Lexington. Pp. 33. \$1.

AUDIO-VISUAL

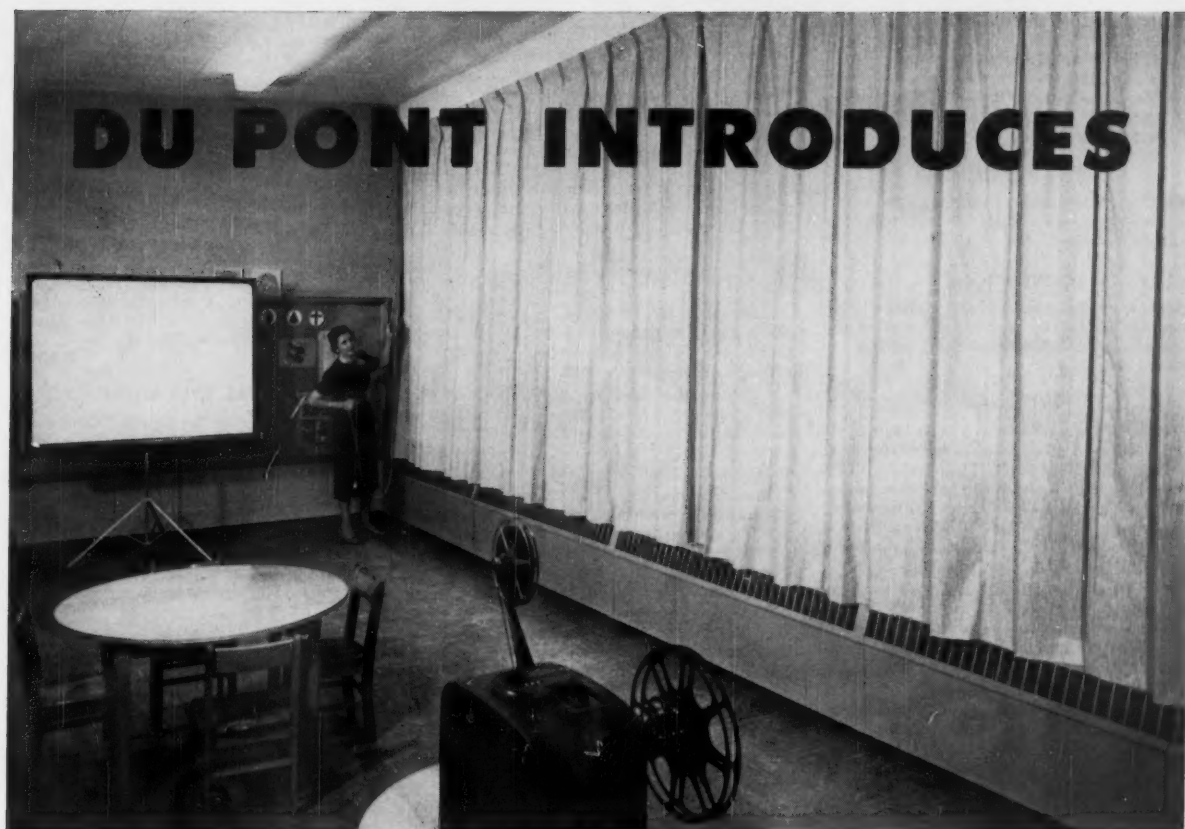
A Directory of 3300 16mm Film Libraries. By Seerley Reid, chief, visual education service, U.S. Office of Education, and others. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 198. 70 cents.

Educational Television for Your Community. Published jointly by the Educational Television and Radio Center, the Joint Council on Educational Television, and the National Association of Educational Broadcasters. Available from the Educational Television and Radio Center, Ann Arbor, Mich. Pp. 24.

CURRICULUM

The Core. Faculty Contributions. By Clara R. Chiara, school of education, Western Michigan College. Published by School of Graduate Studies, Western Michigan College, Kalamazoo. Pp. 86. 50 cents.

(Continued on Page 172)



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Mathematics Teaching Aids for a Stronger America. Our World in Flight Series. Illinois Curriculum Program; Aviation Education Project. Reprinted by National Aviation Education Council, 1025 Connecticut Ave., N.W., Washington 6, D.C. Pp. 75. 75 cents.

FINANCE

Florida Minimum Foundation Program for Our Children. State Department of Education, Tallahassee, Fla. Pp. 27.

FOUNDATIONS

The Ford Foundation and Foreign Affairs. By H. Rowan Gaither Jr., chairman of the board of trustees of the Ford Foundation. Pp. 12.

GUIDANCE

Planning My Future. A discussion of vocational and career planning written for the high school student. Prepared by Bernice L. Neugarten, assistant professor, Committee on Human Development, University of Chicago, and others. National Forum Foundation, 407 S. Dearborn St., Chicago 5, Ill. Pp. 368. \$2.46 (to schools).

The Teacher as a Guidance Worker. By Ira J. Gordon, associate professor of education, Institute for Child Study, University of Maryland. Harper and Bros., 49 E. 33d St., New York 16. Pp. 350. \$4.50.

Case Studies in Human Relationships in Secondary School. One of a series in guidance and student personnel administration. Edited by Esther Lloyd-Jones, Ruth Barry, and Beverly Wolf. Bureau of Publications, Teachers College, Columbia University, New York. Pp. 135. \$2.

RESEARCH

Research Studies in Education, 1955. A subject and author index of doctoral dissertations, reports and field studies and a research methods bibliography. Compiled by Stanley B. Brown, school of education, University of California; Mary Louise Lyda, librarian, University of Colorado, and Carter V. Good, dean, teachers college, University of Cincinnati. Phi Delta Kappa, Inc., Bloomington, Ind. Pp. 119. \$3.50.

SCHOOLHOUSE PLANNING

Manual for North Dakota School Buildings. Revised edition. Issued by department of public instruction, Bismarck, N.D.; M. F. Peterson, supt. Pp. 119.

Planning Facilities for Health, Physical Education and Recreation. By participants in National Facilities Conference. Revised edition. The Athletic Institute, Inc., 239 S. State St., Chicago 4. Pp. 154. \$2.50.

Indiana and Midwest School Building Planning Conference: Proceedings. A symposium on music in the schools. Bulletin of the School of Education, Indiana University, Vol. 32, No. 5. Indiana University Bookstore, Bloomington. Pp. 58. \$1.

Guide for Planning and Equipping Industrial Arts Shops in California Schools. Prepared by California Industrial Arts Shop Planning Committee. California State Department of Education, Sacramento. Pp. 39.

SECONDARY EDUCATION

Assembly Guide for Secondary Schools. Curriculum Bulletin No. 11. Board of Education of the City of New York, 110 Livingston St., Brooklyn, 1. Pp. 52.

Extraclass Activities in Aviation, Photography, Radio for Secondary School Pupils. By Willis C. Brown, specialist, secondary education section, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 48. 25 cents.

Reading Ability and High School Drop-Outs. By Ruth C. Plenty, division of instruction, Battle Creek, Mich. Bureau of Publications, Teachers College, Columbia University, New York 27.

A Survey of Athletics in the Secondary Schools of the North Central Association. Bulletin, school of education, Indiana University, Vol. 32, No. 4. By Otto Hughes and Virgil E. Schooler. Indiana University Bookstore, Bloomington. Pp. 52. \$1.

SPECIAL EDUCATION

Reports based on the study, "Qualifications and Preparation of Teachers of Exceptional Children," by Romaine Mackie, chief, exceptional children and youth, U.S. Office of Education and others: **Teachers of Children Who Are Partially Seeing**, pp. 71, 30 cents; **Teachers of Children Who Are Deaf**, pp. 87, 35 cents; **Teachers of Children Who Are Blind**, pp. 109, 40 cents. U.S. Govt. Prtg. Off., Washington 25, D.C.

TEACHER EDUCATION

Teacher Exchange Opportunities, 1957-58, under the International Educational Exchange Program. Teaching—Summer Seminars. U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 26.

Your First Year of Teaching. By Marion M. Lamb, Sacramento State Teachers College, Sacramento, Calif. South-Western Publishing Co., 5101 Madison Road, Cincinnati 27. Pp. 338. \$3.

Syracuse and Teacher Education. The First Fifty Years. By W. Freeman Galpin, professor of history, Syracuse University. Syracuse University Press. Pp. 56. \$2.50.

UNITED NATIONS

Current School Enrolment Statistics. UNESCO Publications Center, 152 W. 42d St., New York 36. Pp. 47. 40 cents.

Teaching About the United Nations in United States Educational Institutions. By Fredrika M. Tandler, international organization specialist, division of international education, U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 40. 25 cents.

United Nations for the Classroom. A textbook for secondary schools on the United Nations and its work. By Goronwy J. Jones and Evan T. Davis, Great Britain. UNESCO Publications Center, 152 W. 42d St., New York 36. Pp. 172. \$2.

VOCATIONAL EDUCATION

Distributive Education: An Educational Opportunity Available for New Jersey High School Youth and Adults. By Robert D. Joy, supervisor of distributive education, State Department of Education, 175 W. State St., Trenton, 25, N.J. Pp. 10.

National Leadership Development Conference in Trade and Industrial Education. Conference Report, August 1 to 12, 1955. U.S. Office of Education. U.S. Govt. Prtg. Off., Washington 25, D.C. Pp. 118. 60 cents.

FROM SCHOOL DISTRICTS

Arithmetic: the Third R. Superintendent's Annual Report, Cincinnati public schools; Claude V. Courter, supt. Pp. 39.

(Continued on Page 174)

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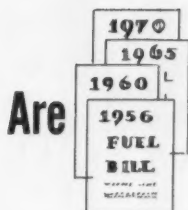
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Citizens in the Making. The development of good citizenship in the schools of Kalamazoo, Mich. Published by the Kalamazoo public schools, Loy Norrix, supt.

Elementary Schools Enrichment Program. City of Erie, Pa., John M. Hickey, supt. Pp. 41.

COMING EVENTS

FEBRUARY

14-16. National School Boards Association, Inc., Atlantic City, N.J.

14-16. American Association of Colleges for Teacher Education, N.E.A., annual convention, Chicago.

15. Susan B. Anthony Day.

15-20. American Association of School Administrators, Atlantic City, N.J.

15-21. National Society for the Study of Education, annual convention, Atlantic City, N.J.

16-20. National School Public Relations Association, N.E.A., midwinter meeting, Atlantic City, N.J.

18-20. American Educational Research Association, annual meeting, Atlantic City, N.J.

23-27. National Association of Secondary-School Principals, N.E.A., 41st annual convention, Washington, D.C.

MARCH

3-6. Department of Audio-Visual Instruction, N.E.A., national convention, Washington, D.C.

3-6. Association for Higher Education, N.E.A., 12th annual conference, Chicago.

17-21. Association for Supervision and Curriculum Development, N.E.A., 12th annual conference, St. Louis.

20-23. National Science Teachers Association, N.E.A., national convention, Cleveland.

24-27. N.E.A. Department of Elementary School Principals, annual meeting, Cincinnati.

29-30. National Council of Teachers of Mathematics, N.E.A., 35th annual meeting, Philadelphia.

APRIL

4. N.E.A. Centennial Birthday Party.

10-12. American Sponsored Schools in Latin America, Inter-American Schools Service of the American Council on Education, 3d annual convention, Washington, D.C.

21-26. Association for Childhood Education International, study conference, Los Angeles.

23-26. National Catholic Educational Association, Milwaukee.

23-27. International Council for Exceptional Children, N.E.A., international conference, Pittsburgh.

JUNE

3-7. Southern States Work Conference, 18th annual meeting, Daytona Beach, Fla.

30-July 6. National Education Association, centennial convention, Philadelphia.

JULY

1-4. National School Public Relations Association, annual meeting, Philadelphia.

8-13. National School Public Relations Association, fourth annual seminar, New York.

OCTOBER

11-12. Department of Rural Education, N.E.A., annual meeting, Denver.

13-16. County and Rural Area Superintendents, 12th national conference, Denver.

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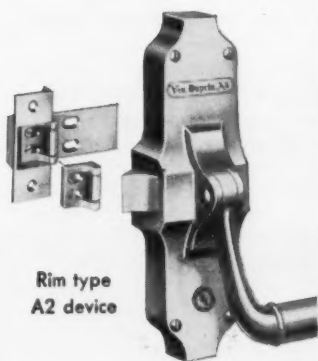
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What's New FOR SCHOOLS

FEBRUARY 1957

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 210. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Automatic Action Folds Table and Bench Unit

Known as "Portables of Tomorrow," the new line of Erickson portable Fold-



A-Way table and bench combination units is completely restyled. Automatic hydraulic action simplifies handling of the units in converting multi-use areas for lunchroom or study. When the unit is unlatched, it operates gently, safely and quietly by itself, saving time of custodian or engineer. Chrome steel is used in the fold-a-way understructure redesigned by Brooks Stevens Associates, industrial designers. The new shape simplifies seating with no bench braces to hurdle. The attractive tops, as well as the understructures, are constructed to withstand the rigors of everyday school use.

Each mobile unit provides seating and table space for 24 students. They require minimum space for storage. Ten units, providing seating and eating space for 240 students, occupy only 4½ by 10 feet of storage area. The units are easily moved to place of use or to storage with minimum effort. **Haldeman-Homme Mfg. Co., 2580 University Ave., St. Paul 14, Minn.**

For more details circle #313 on mailing card.

Restyled Color Line in Kalistron Wall Covering

The durable vinyl wall covering material, Kalistron, is now offered in a completely restyled color line. Made by fusing colored lacquer to the underside of a clear vinyl sheet, Kalistron has a suede-like back for easy installation. It is especially effective for walls in areas of heavy traffic as the color is protected from stains, scratches and abrasive wear.

Twenty entirely new colors are offered in the line, including the warm, striking colors especially suited to modern decorative plans. Also added is Shadowlines, one of the first figured Kalistron patterns. It combines warm, light color

with a random tracing of fine lines and is offered in cloud white, sea green, champagne, Dutch blue, desert mauve and lime. All Kalistron colors and patterns are available in two embossed textures: Textured Weave and Spanish Crush Grain. Kalistron is highly resistant to wear, fire retardant and easy to keep clean. **United States Plywood Corp., 55 W. 44th St., New York 36.**

For more details circle #314 on mailing card.

Basketball Scoreboard for Any Size Gymnasium

The Naden N-525 Basketball Scoreboard features a 26-inch dial clock and four-inch white numerals to show the score and team names. The clock is graduated in seconds and minutes and employs a vivid red sweep second hand. Red bulls-eyes indicate playing period and a vibrating horn and red lights automatically indicate the end of play.



Actual team names can be inserted in place of "Home" and "Visitors" which fit into the scoreboard on slides. The scoreboard is available with an eight, 10 or 20-minute period clock and is 72 inches long and 28 inches high. **Naden Industries, Webster City, Iowa.**

For more details circle #315 on mailing card.

Floor Maintainer with Increased Power

The new Clarke FM-11 floor maintainer employs a specially designed ½ h.p. motor which provides 30 per cent more power with no increase in weight or size. The machine has an 11 inch brush which scrubs, waxes, polishes, steel wools, buffs and shampoos. The high-power motor has lifetime lubricated ball bearings and high starting torque. An adjustable handle locks in any position on a 90 degree arc and flip-up wheels automatically retract when the weight of the maintainer is shifted from wheels to brush. **Clarke Sanding Machine Co., Muskegon, Mich.**

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Tecfab Building Panels for Modern Construction

The result of ten years of research and development, Tecfab Panels of light weight masonry composition are new in design, use and economy. Consisting of a corrugated steel core embedded in precast perlite concrete, the Tecfab Panel can be used for complete wall, interior partition, floor and roof systems. It is quickly erected and features low initial, installation and maintenance costs.

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Sico portable Model B-Y folding table and bench combination is attractive and practical; one of four in the 1957 line. It is described as a cafeteria unit with a capacity of 16 adults or 20 children at the 12-foot model. A 10-foot model is also available. The top is 30 inches wide and seat heights are 13, 15 or 17 inches. Contemporary school colors used in all 1957 models include Platinum Walnut, Lined Rift Oak, Rotary Birch, Tan and Green Linen.

Improvements in the model include a honeycomb core bonded to Masonite on both sides and edged with Prestwood for the table tops, making them impervious to school abuse. Modification of the legs in structure and appearance improve their dual use as supports and as handles for folding and unfolding. The unit is easily and noiselessly folded and unfolded with minimum effort and maximum safety. The 14-gauge structural steel framework gives rigidity and durability and four-inch rubber casters assure easy mobility. The 1900 stationary model in six, seven or eight-foot lengths has all the new features and is designed to fit fixed seating needs. Sico Mfg. Co., Inc., 5202 Eden Ave. S., Minneapolis 24, Minn.

For more details circle #319 on mailing card.

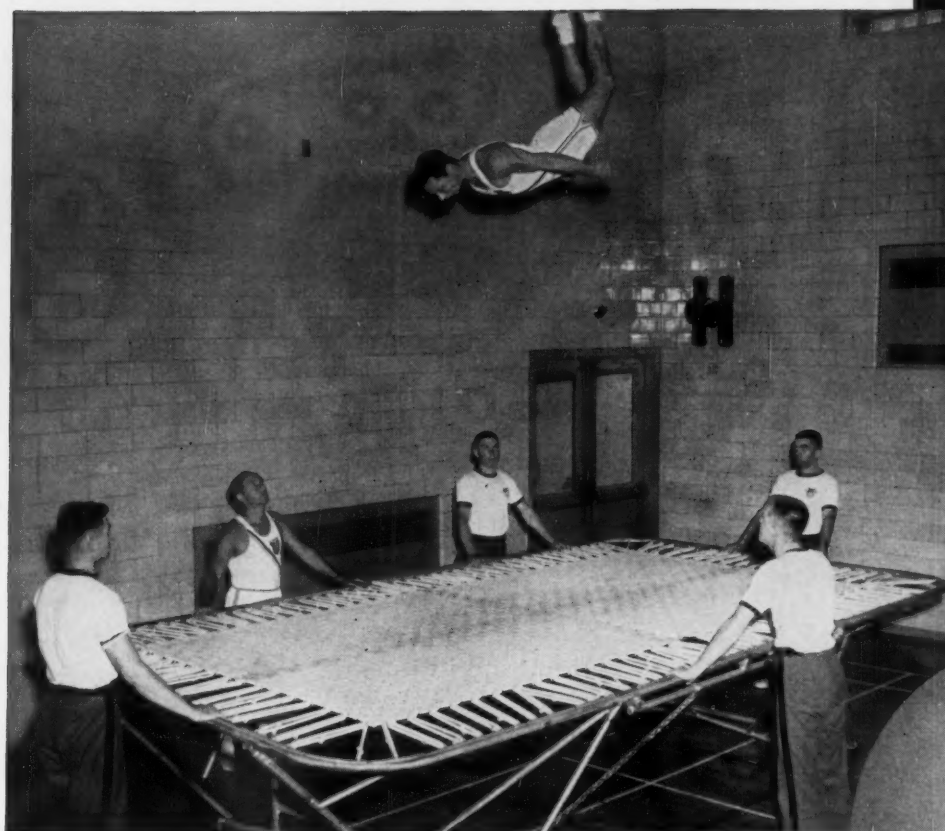
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(Continued on page 180)

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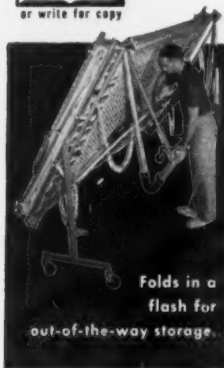
"At the academy, the Nissen Trampoline is used by all our cadets in the physical education program," says Tom Maloney, "as well as by athletes in the various collegiate sports. Coordination, body control and adaption to emergencies of balance are developed more readily through Trampolining. Our varsity divers use the Nissen Trampoline as much as gymnasts."

OVER 5,000 NISSEN TRAMPOLINES IN USE TODAY!

Nissen Trampolines* are playing key roles in well-developed physical education programs everywhere. More than 5,000 schools have them in use today. Available in three styles — Each designed for a specific purpose — Each with the exclusive "flashfold" feature that allows instant folding for easy storage — Each built by Trampoline specialists.

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**AMERICAN
SCHOOL AND
UNIVERSITY**
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TRAMPOLINE COMPANY
CEDAR RAPIDS, IOWA, U. S. A.

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LONDON, ENGLAND



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215 A Avenue, N. W., Cedar Rapids, Iowa, U. S. A.

Please send new 16-page catalog, illustrating and describing Nissen Trampolines, and name of nearest dealer.

NAME OF SCHOOL _____
CITY _____ ZONE _____ STATE _____
BY _____ TITLE _____



COACH TOM MALONEY

Gymnastic coach at the U.S. Military Academy, West Point, New York, winning the eastern inter-collegiate team championship seven times . . . U.S. Olympic Gymnastic Coach in 1952 . . . and Gymnastic judge at the 1956 Olympic Games at Melbourne, Australia.



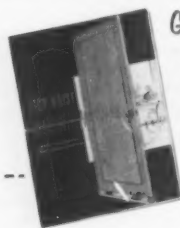
What's New ...



**STOP
UNDESIRABLE
SOUNDS**



Isolate disturbing noise and sound in music and band rooms, gymnasiums, workshops and hallways with this nationally famous sound insulating door. Pre-measured for sound reduction, you know in advance the final noise factor. Sound Insulating Doors come in 35, 40 and 43 decibel degrees of transmission loss. Write for details or consult your architect or acoustical engineer.



Get this FREE brochure

It tells in understandable non-technical language how SOUND INSULATING DOORS function — how sound intensity is measured and controlled.

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HARDWOOD PRODUCTS CORPORATION
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Apple Flavor in Various Forms

Gumpert has announced the addition of two apple flavors to its line of foods. Apple Flavor is now available in the Velvet Smooth line of water ices and sherbet bases in jellied form. This new flavor in the ice cream field is offered in quart sizes to make 2½ gallons of finished water ice or sherbet and in a gallon size container sufficient for ten gallons of the finished product. A new Apple Punch Flavor is also introduced in powdered form for institutional use. It is supplied in 16 ounce and five pound tins. S. Gumpert Co., Inc., 812 Jersey Ave., Jersey City, N.J.

For more details circle #321 on mailing card.

Folding Chairs in Juvenile Size

Hampden has expanded its line of folding chairs with five new juvenile size models for kindergarten and lower elementary school use. All chairs withstand hard wear, yet are comfortably contoured and will not tip or wobble. The chairs are rustproof and feature a new multiple-



spray, chipproof enamel finish.

Three tubular steel models are available: Model 61 with blond plywood seat; Model 66 with all steel seat, and Model 67, illustrated, with upholstered seat. Two models are constructed of channel steel; Model 64 with upholstered seat and Model 65 with steel seat. Frames are available in beige or gray with upholstered seats in a choice of brown, red or green. Hampden Specialty Products, Inc., Easthampton, Mass.

For more details circle #322 on mailing card.

Acoustical Tile Is Non-Combustible

With non-combustible qualities, Fresco Acoustical Tile looks like stippled plaster. The rough white finish may be spray-painted to match decorative schemes and is available in 12 by 12 or 12 by 24 inch sizes. Fresco may be installed on a concealed suspension system or adhered directly to the underside of any surface. Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

For more details circle #323 on mailing card.

Toilet Compartments in Junior Height

Mills has introduced a new junior height in its line of Marblmetal Floor Braced toilet compartments. The units



allow privacy for lower elementary and kindergarten children, yet permit supervision by the teacher in charge.

Mills floor braced compartments are easy to install and eliminate overhead bracing and unnecessary lines for modern attractive appearance. They are constructed of furniture steel, galvanized-Bonderized, or porcelain enamel steel, and finished in porcelain enamel or baked-on enamel in a choice of several colors. The Mills Company, 951 Way-side Rd., Cleveland 10, Ohio.

For more details circle #324 on mailing card.

Shop Drawing Unit for Multiple Student Use

The SPS Shop Drawing Unit, consisting of a fixed position drawing table, companion drawing board and drawer-tier storage cabinet, has been designed for use by many students. The drawing table is constructed with a single drawer-slide under the working surface. Only one drawer, that of the student using the table during any given class, is installed in the table. Other drawers can be stored and locked with an individually fitted key in the drawer-tier unit. Drawing boards can similarly be stored in the cabinet, which holds 12 boards of any size up to 18 by 24 inches.

The drawing table employs a fixed position laminated wood top set on a base of heavy gauge satin finished aluminum tubing. Units, described as "boy-



proof," have been engineered to resist and minimize damage by student neglect or mischief. Standard Pressed Steel Co., Jenkintown, Pa.

For more details circle #325 on mailing card.

(Continued on page 182)



is SWEEPING

3 times
the job



...it should be?

Have you studied your floor maintenance costs lately? Take, for example, a simple operation like sweeping. Are you just moving dust from one spot to another? The right sweeping tool and the right brush dressing can make all the difference. Remember, 95c of each floor maintenance dollar goes for labor. That's why it pays to call in your nearby Hillyard Maintaineer® for a consultation. He'll carefully study your floor maintenance problems; recommend methods, materials and tools to do the job efficiently—and save you money!



The Hillyard Maintaineer is the man who brings Hillyard experience to your problem. He is "On Your Staff, Not Your Payroll!"



ST. JOSEPH, MISSOURI
SAN JOSE, CALIF.
PASSAIC, N. J.

CASE HISTORY—SWEEPING

FILE III

Super Hil-Tone, Hillyard's Non-Oily Dressing, AD-SORBS dust (attracts and holds it by magnetic attraction) first to the floor, then to the brush—then releases it cleanly when brush is shaken. No old-fashioned "blotter action" to load the brush, leave streaks, cause brush "drag"—Gives a clean, lustrous floor in a fraction of the time. U/L approved slip-resistant. Non-darkening. Safe for any sealed surface.

SEE IF THE MAINTAINER CAN HELP YOU!

HILLYARD St. Joseph, Mo.

Yes, I'll take you up! Without charge or obligation, have the Hillyard Maintaineer® show me how to take advantage of new streamlined floor treatment procedures.

Name _____

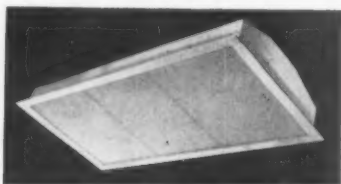
Institution _____

Address _____

City _____ State _____

What's New ...

Recessed Troffers Fit Many Ceiling Systems



Eight new models of two inch wide Guth Recessed Troffers have been designed to fit 83 different ceiling suspension systems. The new models feature the

Gratelite louver diffuser for high illumination intensities with low brightness. Skytex and low brightness lenses are also available. The troffers are available in two and four inch lengths, in two, three and four light units, and are constructed of heavy gauge, zinc-coated and bonderized steel. **The Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.**

For more details circle #326 on mailing card.

Speed, Quiet and Color in Improved Calculating Machine

The new Monroe "800" calculating

machine is designed for speed, quiet operation and appearance to harmonize with modern decor. Keys are colored according to function, which simplifies and speeds operation. The higher cycling



mechanism in the new model provides fast, silent operation.

Built for rugged use and reliability, the new "800" is mounted on rollers for greater mobility. It offers single or double spacing and has a hinged cover to facilitate changing of ribbon and paper. When the total key is depressed the tape glides to the tear-off position. The tear-off knife is transparent, leaving figures visible at all times. The machine has all of the features of the earlier series "400" and is finished in attractive colors. **Monroe Calculating Machine Co., Inc., Orange, N.J.**

For more details circle #327 on mailing card.



FOR THE YOUNGER
SET

New Life

LIBRARY COMFORT

We at Sjöström of Philadelphia know that Johnny and Jane can and like to read. That's why our "New Life" library furniture includes quality-comfort juvenile items of inherent beauty, seen here at San Diego Public Library.

John E. Sjöström Company, Inc.

1717 NORTH TENTH STREET, PHILADELPHIA 22, PA.

Adjustable Posture Chairs for Commercial Classrooms

Harco of Garrett has introduced a new line of adjustable posture chairs and stools to be used with their commercial room stands and tables. The chairs are



comfortable and practical for any size student through the use of a three inch adjustment range in seat height and a sturdy plywood back which pivots and adjusts up and down.

The plywood seat is saddle shaped and swivels, or is stationary if desired. The one-inch by 16 gauge tubular steel base has a 21-inch base spread for over-all balance. Colors available include Coral Tan, Mist Green and Platinum Gray. Stools with similar construction advantages are available for laboratories, training shops and other uses. **Hardware Engineering Co., Inc., 802 E. King St., Garrett, Ind.**

For more details circle #328 on mailing card.

(Continued on page 186)

Write your own specifications:

VOLATILITY
B.T.U.'s
SIZE
ASH
MOISTURE
SULPHUR
A.S.T.

... the modern, efficient mines
on the C&O can produce
just what you want.



For dependable deliveries of top quality coals, contact coal producers on the C&O. And if you need help in meeting your own particular fuel requirements, write to: R. C. Riedinger, General Coal Traffic Manager, Chesapeake & Ohio Railway Company, Terminal Tower, Cleveland 1, Ohio.



Chesapeake and Ohio Railway

WORLD'S LARGEST CARRIER OF BITUMINOUS COAL

NOW READY—AUTHORITATIVE, PRACTICAL HELP AT EVERY STEP OF THE SCHOOL BUILDING PROGRAM

SCHOOL PLANNING AND BUILDING HANDBOOK

by N. L. Engelhardt, N. L. Engelhardt Jr., and Stanton Leggett
members of the firm Engelhardt, Engelhardt, Leggett and Cornell,
Educational Consultants.



in collaboration with over 85 leading authorities, including:

School Administrators and Officials
Architects, Educators, Engineers
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. . . and other school specialists

Here for the first time is the only practical handbook dealing with every phase of planning and executing school building programs. This one book is the best source of information needed every day by members of boards of education, school building committees, school business managers, superintendents of schools, and everyone else concerned with the school building program.

Specifically, this new book will:

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3. Provide complete checklists and specimen contracts covering every contractual relationship entered into in planning and executing the program.
4. Render advice and make specific recommendations regarding legal services, accounting and budget procedures and controls, insurance coverage, maintenance, inspection of work, incidental and extra cost items, public relations, purchasing, financing, and other specialized problems of your program.

SCHOOL PLANNING AND BUILDING HANDBOOK does not deal in generalities—it is the most specific, practical work ever published in this field. It is a priceless reservoir of vital facts which will be a constant aid to you in your school building program.

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40 IMPORTANT CHAPTERS

(headings abridged here)

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2. Responsibilities of Board, Superintendent, Professional Experts: Administrative Organization, Specialists
3. The School Building Survey: Trends, Scope, Building in a Changing Community
4. Educational Specifications for New School Buildings: Requirements, Planning the Primary Classroom, Developing a Program
5. Public Relations: Importance, Literature, Organizing for an Intensive Campaign
6. Local Administrative Variations
7. Planning for Equipment, Furniture: Trends in Equipment, Responsibilities
8. Budget and Accounting for Programs: Capital Budget of the Community, Necessary Accounting Records
9. School Site Selection: Trend toward One-story Construction, How Community Progress Affects the Schools
10. Acquisition of Sites: Board Policy, Eminent Domain, Condemnation
11. Standards for Site Engineering Surveys
12. Contract with the School Building Architect
13. Contract with the Engineer: Specialized Engineering Problems, Engineer's Fees and Contracts
14. Problems of Land Use and Landscaping: Changing Concepts, Estimating the Cost
15. Sanitary and Storm Drainage: Appraisal of Problem
16. Standards for Architects' and Engineers' Preliminary Drawings
17. Preliminary Planning in a Large City
18. Scale Models and Perspective Renderings
19. Final Preliminary Specifications
20. Standards for Subsurface Exploration and Test Borings: Purpose, Field Operation, Application of Results
21. Statement of Preliminary Estimates of Cost
22. Standards for Final Working Drawings
23. The Volume of Final Specifications
24. Final Specifications of Materials and Workmanship: Writing the Final Specifications, Assurance of Superior Results
25. General Conditions of Contract: Sample Contracts
26. Detail Drawings and Shop Drawings
27. Cost Estimates Based on Final Plans and Specifications: Design-stage Estimating, Comparison of Project Costs
28. Incidental and Extra Costs
29. Problems Associated with Bidding
30. Contracts of Construction
31. Supervision of Construction: Architect's Over-all Responsibility, Clerk-of-the-Works, Advance Appointment of the Building Custodian
32. Insurance Coverage for School Construction
33. Surety Bonds on School Construction
34. Unit Costs and Their Interpretation
35. Timetable for School Building Projects: Sources of Delays, Adjusting Schedules
36. The Measure of School Building Design
37. Publicizing School Building Projects
38. Legal Services: Needs, Checklists of Possible Legal Problems
39. Financing: Pay-as-you-go Plan, Selling School Bonds
40. Naming the School, Cornerstone Laying, and Dedication: Ceremonies, Errors and Pitfalls to be Avoided

What's New ...

Filmstrip Viewer Is Self-Contained Unit

The new S.V.E. "E-Z Viewer" is a compact unit which can be used on a desk or held in the hand for previewing

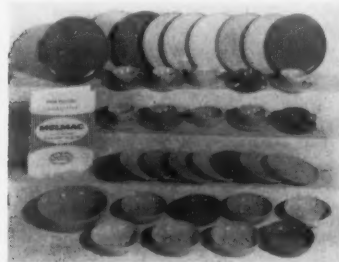


or reviewing filmstrips. The viewer employs a two polished lens optical system which enlarges single-frame filmstrips three times. A metal stand assures a 45 degree viewing angle and when folded the unit is 4½ inches wide, 2¾ inches high and 5¾ inches long, weighing 1½ pounds. An on-or-off switch operates a 7.5-watt night light on a 110-120 AC power source. Society for Visual Education, Inc., 1345 W. Diversey Pkwy., Chicago 14.

For more details circle #329 on mailing card.

Melmac Dinnerware in Decorated or Plain Patterns

Melmac, the melamine plastic molding compound manufactured by the American Cyanamid Company, is used in the molding of the new Stetson line of plastic dinnerware. Stetson China, manufacturer of handpainted pottery dinnerware, has recently added the line of melamine plastic dinnerware which is offered in



decorated and undecorated patterns, solid colors, color on color and in special modern and traditional designs created by Ansel.

The new line is offered in open stock and service sets. It can be washed in hot water with any soap or detergent or in dishwashing machines without warping or fading and does not show contact marks from other dinnerware. Stetson Melmac ware resists cracking, chipping and breakage, even when dropped, stacks easily and quietly, and is odorless and tasteless. Colors, patterns and designs are carried through the material to prevent wear and fading. Stetson China Co., Merchandise Mart, Chicago 54.

For more details circle #330 on mailing card.



Enjoy custom-built advantages
at production prices ...

with **R-W**

In-a-Wall

TRADEMARK

**CLASSROOM
WARDROBES**

PATENTED



Advantages

- Rigid, durable construction
- Individually operated doors
- Quiet, easy operation
- Effective ventilation
- Full recess opening
- No obstructing hardware
- 6-way adjustment—perfect alignment
- Easily installed
- Available in wood or steel units

Fill your exact wardrobe requirements with R-W 785 In-a-Wall wardrobes... the modern, flexible unit system that makes it possible to achieve custom wardrobe installations at production prices. R-W 785 In-a-Wall Wardrobes combine flexible adaptability with the latest in modern styling, dependable operation and efficient performance. Each five foot unit will accommodate 20 pupils... wardrobes may be equipped with cork bulletin boards, chalk boards and chalk troughs if desired. Dollar for dollar... feature for feature... you can't beat the value of R-W In-a-Wall Classroom Wardrobes. Installation supervised and guaranteed.

WRITE TODAY for complete information... request Bulletin No. F-180.

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What's New ...

Folding Steel Door Allows Ventilation

The new Fenestra folding steel doors are louvered to permit full ventilation even when doors are closed. Ideal for



closets and storage areas, the doors are easily installed and can be painted to match room colors. The doors fold back to jambs for full access to the storage area, yet take up little floor space.

Construction features of the new line include ample clearance, non-sagging or warping, quiet operation, maximum service life, no jumping off track and no maintenance. The doors are available in six feet eight inches and eight feet heights, in widths to meet most requirements. Fenestra Inc., 3255 Griffin St., Detroit 11, Mich.

For more details circle #331 on mailing card.

Portable Water Carrier Rolls onto Athletic Field

Athletes can refresh themselves quickly and in a sanitary manner with the new Behrens Portable Water Caddy. The unit consists of a five-gallon stainless steel tank mounted on semi-pneumatic rubber



tired wheels with two push-button fountains which deliver iced water under a steady pressurized flow. A sturdy tubular steel hand rail and long pulling handle facilitate delivery of the Water Caddy across the field to the players. The model is completely sanitary, dustproof and easy to clean and fill. Behrens Mfg. Co., Inc., Waukesha, Wis.

For more details circle #332 on mailing card.

(Continued on page 188)



Lunch time. Miss Barnes sees smoke in the West Wing! She lifts the Bogen Fire-Alarm handset from the wall-box. In the crowded dining hall pupils hear, "Students, please go out into the playground through the East Wing." Children and teachers march out while Miss Barnes notifies the fire department. This is the modern way to handle an emergency... with your Sound System by Bogen, world's largest exclusive sound system manufacturer. Write Dept. SN, David Bogen Co., Inc., P.O. Box 500, Paramus, New Jersey.



you are there... with a

Bogen

SCHOOL SOUND SYSTEM

A UNITEDHISCO CORPORATION AFFILIATE

(Architects: See Sweets 32 a-Bo)

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New DETCO PROCESS State Flags printed in full color — sun and rain fast — very economical

ASK ABOUT DETTRA'S MOVIE "OUR U. S. FLAG" The Freedom Foundation Award winning 16 mm color sound film... the ideal way to tell the story of our flag.

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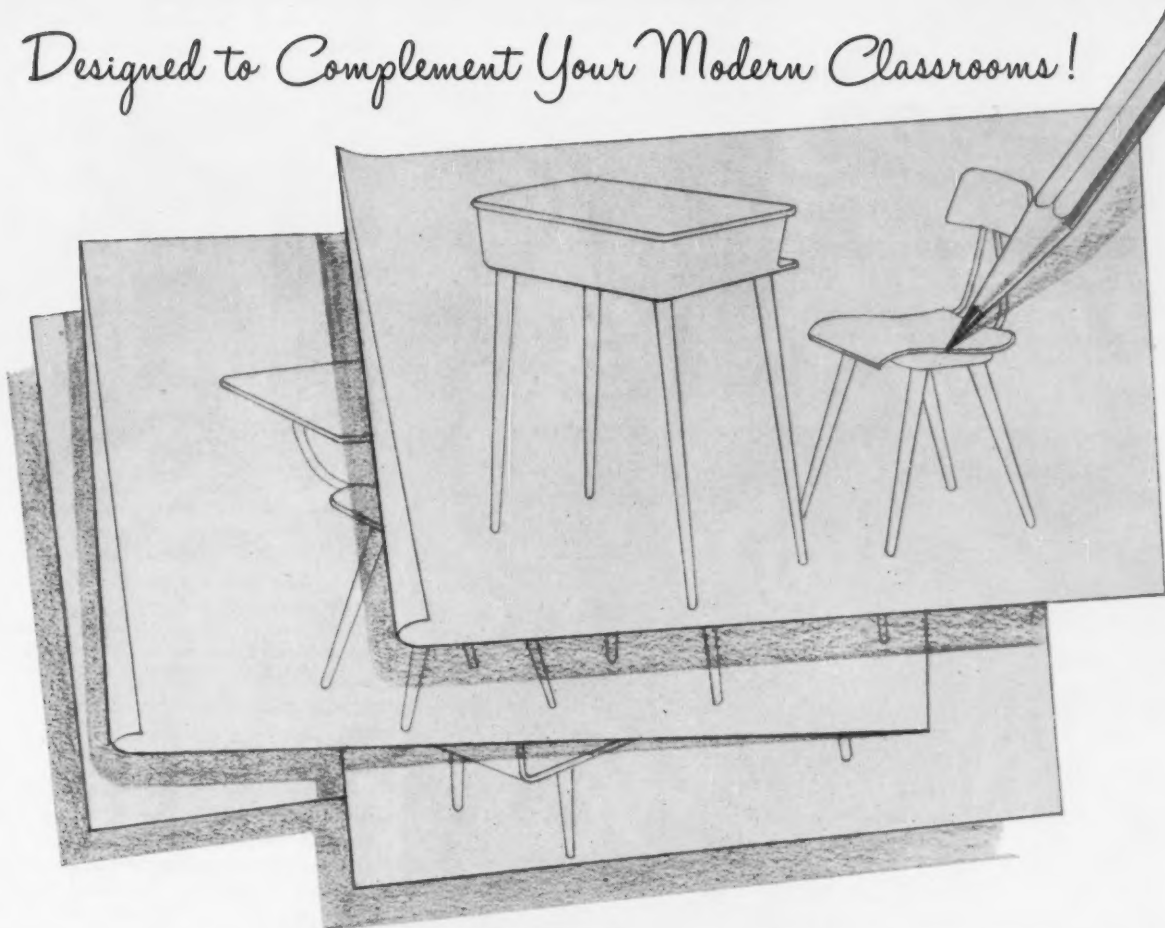


DETTRA FLAG CO., INC.

Oaks, Pennsylvania

Flagmaker to the Nation for more than 50 years

Designed to Complement Your Modern Classrooms!



NEW GRIGGS *Tempo* **SCHOOL SEATING**

See it on display at ATLANTIC CITY

Your first look at the new Griggs TEMPO line will tell you, "here's classroom seating that will stay in step with the times."

The clean functional styling of Griggs TEMPO matches the many years of service that are built into every piece of Griggs equipment. TEMPO comes in five favorite colors to give a fresh new look to every room in your school.

SEE GRIGGS IN BOOTHS 1415-17-19-21

AMERICAN ASSOCIATION of SCHOOL ADMINISTRATORS

Annual Convention

ATLANTIC CITY

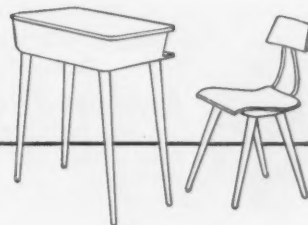
February 15-20

GRIGGS

EQUIPMENT, INC.

BELTON, TEXAS

Write today for 1957 Catalog of Griggs Classroom and Auditorium seating.



What's New ...

Prismalume Lighting Is Free From Glare

The new Prismalume Controlens No. 6024 fluorescent lighting fixture produces



high footcandle lighting which is entirely free from glare. It is designed for troffer installations, luminous ceiling panels or complete over-all ceilings, for

installation in two-foot fluorescent source modules. It employs conical prismatic elements formed in a concave shape, having both longitudinal and transverse fins. The new lighting design is effective for use in schools, auditoriums and other public areas. **Holophane Company, Inc., 342 Madison Ave., New York 17.**

For more details circle #333 on mailing card.

Locker Rack Takes Minimum Space

Where clothes storage floor space is limited, the Lyon Locker Rack provides a convenient and practical solution. Ac-

commodating 10 persons, the rack is 50 inches wide, 18 inches deep and 76 inches high with all compartments at a convenient level. Coats and jackets can



be locked to the rack by a hanger and chain arrangement and each door is equipped with a built-in lock with two keys. The rack is portable and can be easily moved to any place of need. It is finished in gray baked-on enamel. **Lyon Metal Products, Inc., Aurora, Ill.**

For more details circle #334 on mailing card.



Over a million children are now **PLAYING SAFE** on **WALK-TOP**

Walk-Top is the smooth, resilient surfacing material developed especially for play areas.

Across the nation, school executives are selecting Walk-Top for sealing and surfacing play areas, both on existing pavements and on new construction.

The reason: *Walk-Top provides a safe, smooth, non-abrasive surface at a very low cost.*

Our office nearest you will provide full information.



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WALK-TOP® IS ONE OF THE FAMOUS LAYKOLD FAMILY OF QUALITY ASPHALT PRODUCTS

Paint Applicator for Craft Work

A one-ounce metallic tube with a built-in ball point dispenser on one end permits easy application of paint for decorating and monogramming various surfaces. Interesting free hand decorations are possible without stencils or masks when the special paint, based on Pliolite S-5, is employed with the new penlike applicator.

Known as Amazart, it can also be used for marking and code work. Paint may be applied with the new dispenser to fabrics, wood, glass, pottery, plastic, tile, metal and other smooth surfaces. It dries fast and provides an indelible surface decoration. **Binney & Smith, Inc., 380 Madison Ave., New York 17.**

For more details circle #335 on mailing card.

Concentrated Detergent in Liquid Form

Oakite Liqui-Det is a new detergent, containing no soap, which goes instantly into solution in hard or soft water, hot or cold. It develops copious suds which penetrate and loosen most common soils in a short time. The report states that it can be used repeatedly without rinsing, and without causing any build-up of film or discoloration. Liqui-Det is designed to be safe for use on every type of surface while being pleasant to the hands. Good results from low concentrations make the product economical in use. **Oakite Products, Inc., 1280 Rector St., New York 6.**

For more details circle #336 on mailing card

(Continued on page 190)

VICTOR HELPS YOU DEVELOP THE GREATEST RESOURCE OF ALL . . .



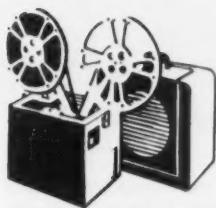
With easy-to-operate, high-performance 16mm Sound Projectors

Never before has the need for adequate education had such far-reaching significance — and never before has there been such an acute pressure on teaching facilities. The increasing use of 16mm films has done much to answer both needs.

Because the effectiveness of 16mm film programs depends so heavily on the smooth continuity and technical quality of the sound and picture presentation, more and more educators are relying on Victor 16mm sound motion picture equipment. Simple to operate, the Victor projector features extreme portability, 3-spot threading and a fingertip control panel. Films are protected from damage by Victor's Safety Film Trips. And the clear pictures and sharp contrasts possible under classroom conditions, together with Victor's undistorted sound assure maximum impression and retention of the film story.

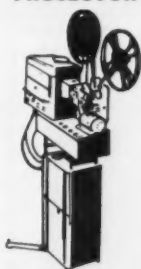
VICTOR AUDIO-VISUAL AIDS

VICTOR SOUND PROJECTORS



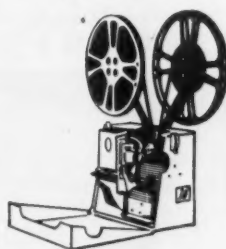
Available in three standard models: the Classmate 4, Assembly 10 and Sovereign 25.

VICTOR ARC PROJECTOR



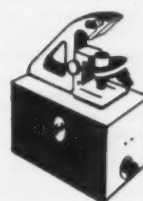
A portable arc projector that meets the needs of your largest assemblies. Supplies 1600 lumens on the screen, up to 25 watts speaker output.

VICTOR SILENT 16



Rheostat speed control, 2000-foot reel capacity, and single switch reverse standard equipment. Takes any wide screen lens.

VICTOR MAGNASCOPE V200T



A professional laboratory instrument that enlarges, projects microscopic specimens on wall screen or tabletop. Two classroom models available.



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VICTOR
Animatograph Corporation

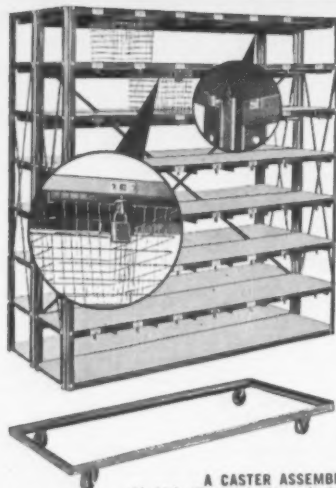
Dept. A-27, Davenport, Iowa, U. S. A.
NEW YORK, CHICAGO



Quality Motion Picture Equipment Since 1910

What's New ...

Any Size GYMNASIUM BASKET RACKS WITH RECESSED HASPS.



A CASTER ASSEMBLY
Made to fit any single or double rack, may be added or removed at any time.

Insist on Neubauer Basket Racks for these exclusive features:

1. Rigid twin-post corners make the whole rack stronger,
2. Your choice of any size to fit odd baskets or limited space*,
3. Easier assembly, hasps and dividers installed at the factory,
4. Recessed hasps can't snag clothing or cause injury, (Hasps omitted if desired) plus a choice of four popular baked enamel finishes, plated hardware, sturdy bracing, and other details of quality.

**STORAGE
SHELVING**
with patented
twin-post corners



**AND
LIBRARY
SHELVING**

with beautifully finished end panels, can be furnished in any size to fit your room dimensions. Baked enamel colors are green, grey, tan and beige.

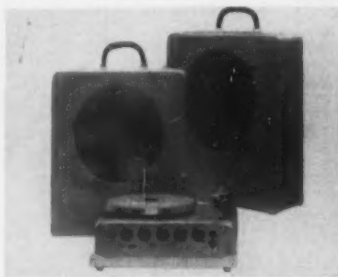
***No extra charge**

You don't pay a premium for odd sizes when you buy Neubauer racks and shelving.

**TWIN POST
Neubauer
MANUFACTURING CO.
517 LOWRY AVENUE N.E.
MINNEAPOLIS 18, MINN.**

Portable Sound System Fills Any School Need

The 1957 Califone Commander Phonograph, Model 40V-7, meets the require-



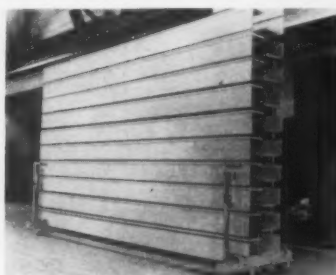
ments of schools for a powerful sound system for use in gymnasiums, recreation areas and playgrounds. A high fidelity amplifier and two heavy duty speakers make up a single unit with the amplifier to complete the system.

The Commander phonograph employs all the construction advantages of other Califone models. Separate tone controls on microphone input, and separate controls for treble and bass on phonograph, with mixer control for two microphones and phonograph make possible perfect balance of voice and music. For easy identification, controls for microphone No. 1 are red, for microphone No. 2, black and those for the phonograph are blue. Two additional speakers in a matching case are optional. Califone Corp., 1041 N. Sycamore Ave., Hollywood 38, Calif.

For more details circle #337 on mailing card.

Hydraulic Lift Truck for Rolling Gymstands

Wayne Movable Rolling Gymstands are now equipped with a specially designed hydraulic lift truck to permit easier raising and lowering of the gym-



stand section and safer transportation of the units. The truck, with a three-ton lifting power, need only be slipped under the closed unit and pumped with the hydraulic jack handle to lift even the largest unit. The sudden "let-go" action of raising a gymstand is eliminated with the hydraulic operation. A movable gymstand unit is also more easily placed between two fixed gymstands with the greater maneuverability provided by the truck. Wayne Iron Works, Wayne, Pa.

For more details circle #338 on mailing card.

(Continued on page 192)

monroe FOLDING BANQUET TABLES



Direct Prices
and Discounts to
Schools, Churches,
Clubs, Lodges and
All Organizations

COMPLETE CATALOG
ON REQUEST

TRUCKS FOR FOLDING TABLES



Monroe TS (transport - storage) Trucks make handling and storing of Folding Tables easy and quick. Combination offers.

STEEL FOLDING CHAIRS



Monroe Steel Folding Chairs in attractive range of styles, sizes and prices. Excel in comfort, easy handling and durability. Also full line of non-folding chairs, desks and combinations for classroom, cafeteria and church school use.

PORTABLE PARTITIONS



Monroe's new movable partitions change idle space into useful areas. Smooth Masonite panels, tubular steel frames, swivel pedestals, casters or glides.

THE Monroe COMPANY
76 Church St. Colfax, Iowa

... for the large library



THE STANDARD DELUXE FILMSTRIP LIBRARY PLAN NO. 360D

- Smart and good-looking • 4 drawers, each holding 90 filmstrips. 360 in all. Equipped with extension arms so drawers open and close easily. • Extra strong all-steel cabinet in beautiful silver-gray hammerloid. • Individual key-numbered compartments. • As your film library grows, you lock-stack additional units of the No. 360D. • Great for large and growing filmstrip libraries. • Drawers can be converted to 2" x 2" slide filing. • Measures 10 3/4" high, 16" deep, 19 1/2" wide. • Proving more popular daily

\$47.90

Many other larger and smaller filmstrip library plans also available

**SEE YOUR VISUAL EDUCATION
OR SCHOOL SUPPLY DEALER**

JACK C. COFFEY CO.
710 17th St., NORTH Chicago, Ill.

Norman, Oklahoma, High School and
City Auditorium. Caudill, Rowlett,
Scott & Associates, Bryan, Texas,
and Perkins & Will, Chicago,
Associated Architects-Engineers.
Photos by Hedrich-Blessing Studio.



floored for
**maximum
usefulness!**



NORTHERN HARD MAPLE

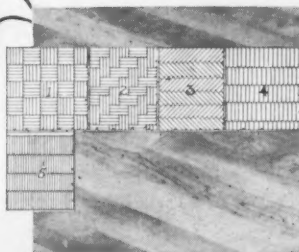
The "foot-friendly" floors of the gymnasium and the band room in this emphatically modern high school provide maximum utility, versatility and service-life expectancy. *That*, you'll agree, is a good deal to obtain in one "package." Floors of Northern Hard Maple, guaranteed as to species, grade, dimension and mill-work by rigid MFMA standards, have delivered such value for generations. No other flooring or floor covering can approach this magnificent wood in its natural resistance to scars, dents and abrasion. Its bright, tight, tough, resilient character needs only simplest maintenance. Modern finishing methods give lasting luster to its beautiful grain. Floor your multi-purpose areas with MFMA-certified flooring. It has earned your confidence. SEE SWEET'S 13j-MA. Write for List of MFMA-approved Finishing Products.

MAPLE FLOORING MANUFACTURERS ASSOCIATION

Suite 589, Pure Oil Building, 35 East Wacker Drive, Chicago 1, Illinois



Available in blocks and modern patterned designs as well as the more conventional strip form. Readily laid in mastic, over concrete or softwood sub-flooring.



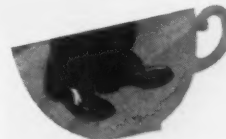
for BASKETBALL



for DANCING



for
CLASS ACTIVITY



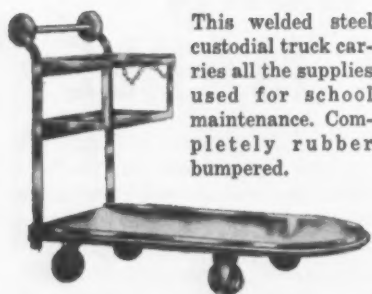
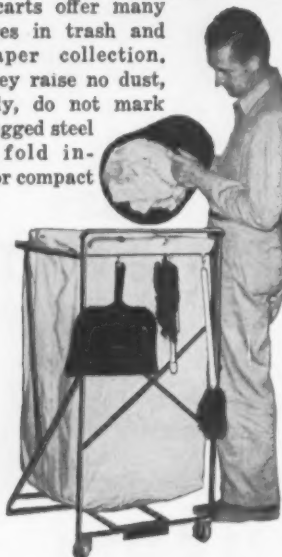
for GATHERINGS

**Collect Wastepaper
Handle Trash
Move Supplies**

YOUNGS

**Janitor Carts
do all three!**

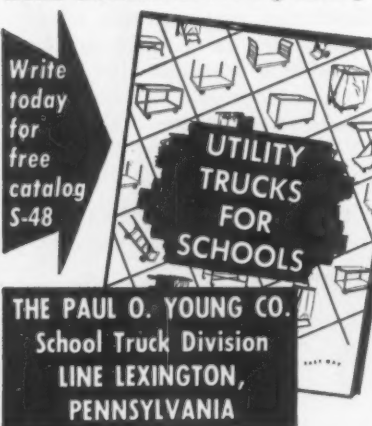
Janitor carts offer many advantages in trash and waste-paper collection. Quiet, they raise no dust, roll easily, do not mark floors. Rugged steel frames fold instantly for compact storage.



This welded steel custodial truck carries all the supplies used for school maintenance. Completely rubber bumpered.

These are only two of the 78 utility trucks described in our big catalog.

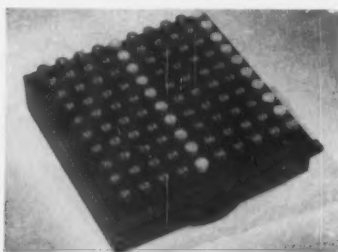
Write today for free catalog S-48



What's New ...

Card-Punching Device Records School Bus Attendance

Because centralized school systems have felt the need for keeping track of school



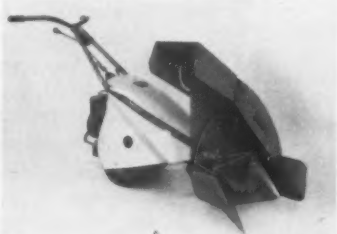
bus riders, Robert E. Tompkins, Inc. has introduced the Attendicorder. The unit is a complete card-punching device which automatically records a permanent daily attendance sheet to assure that pupils are on the right bus.

The Attendicorder is a compact unit which is installed to the right of the driver. As a child boards the bus, the operator depresses his number and the keys automatically punch a removable record sheet inside the machine. The record can be checked as soon as the bus is loaded. Two models are available, the "80" and "100" which handle 80 and 100 children respectively. The Attendicorder is constructed of steel and occupies eight by eight and one-half inches of space. Robert E. Tompkins, Inc., 751 Clay Rd., Rochester 23, N.Y.

For more details circle #339 on mailing card.

Lawn Maintenance Unit Has Snowthrower

The Jari Junior power unit with Snowthrower attachment handles up to 300 shovelfuls of snow per minute by throwing the snow in one direction. A special raker bar cuts up packed snow



into small pieces which can also be easily thrown aside. The attachment can be used through drifts up to 18 inches and deeper.

The snowthrower attachment is easily removed and replaced by a lawnmower, power sprayer, sickle bar mower and tiller-cultivator. The power unit features an aluminum 1.75 h.p. engine, adjustable handlebars and clutch control rod which provides positive forward drive. Jari Products, Inc., 2990 Pillsbury Ave. S., Minneapolis 8, Minn.

For more details circle #340 on mailing card.

(Continued on page 194)



**Inspiration
Unlimited!**

Don't just buy crayons for your children. Give them the crayons that have a future—Prang Crayonex!

For more COLOR, more VARIETY, more BRILLIANCE and better BLENDING qualities pick the BEST!

A box for every size and purpose. Ask your "Prang-Man" to show you the big assortment of Crayonex packages.

FAVORITES WITH THE "CRAYON CROWD" THE COUNTRY OVER!

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THE AMERICAN CRAYON COMPANY
SANDUSKY, OHIO. NEW YORK



ON TOP OF THE LADDER

PROFESSIONAL PAINTERS everywhere realize that the success or failure of a particular job is directly dependent upon their skill and the quality of paints they have with them . . . on top of the ladder.

And we at Devoe, who have devoted the past 203 years exclusively to the paint industry, are extremely gratified and proud of the confidence you have shown in Devoe products.

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Outstanding products which are "firsts" with Devoe are—Wonder-Pruf Masonry Finish (pat. pending), the latest in wall-sealing finishes; Vinyl Wonder-Tones, the world's fastest paint; and improved Wonder-matic Colors that really sell and satisfy customers.

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Vol. 59, No. 2, February 1957

193

What's New ...

Motorized Microfilm Reader Has Large Viewing Screen

The improved 16 mm motorized Model PM-1 Recordak Film Reader provides a new 14 inch viewing screen. Electronic controls permit film travel controlled between speeds of one foot per minute for scanning, to a rewinding speed of 600 feet per minute. For slow inspection of film, the electronic controls permit the scanning lever to be locked at any speed desired for continuous inspection. Higher magnification of 30 and 40 diameters are obtained with accessory interchangeable lenses.



With the wider screen no special scanning mechanism is required for easy reading of documents. It also shows in full, one face of all documents micro-filmed at higher reductions by the duplex or duo methods, while part of the backs of these documents is brought into view, eliminating considerable scanning to check information on the back image. All operating controls are mounted conveniently for the operator and a foot pedal film control is furnished if desired. The new model also has a built-in feature for reproducing paper facsimiles from the projected microfilm images when desired. **Recordak Corporation, 415 Madison Ave., New York 17.**

For more details circle #341 on mailing card.

there's
no
substitute
for
SLATE

... easier reading
... writing
... cleaning

WRITE FOR YOUR
FREE COPY OF:

"SLATE CHALKBOARDS IN MODERN SCHOOLS"

(contains little-known facts about chalkboard visibility, geographical listing of outstanding modern schools using slate chalkboards, cost comparisons, maintenance tips and authoritative bibliography)

"THINGS THAT MATTER MOST ABOUT CHALKBOARDS"

(discusses six basic considerations in chalkboard selection)

"TIPS ON EASY CHALK- BOARD CARE"

(nine time-saving steps for trouble-free chalkboard care, including the scouring technique to eliminate need for future resurfacing)

Nothing equals the ease of teacher-student communication like the superior contrast of white chalk on a natural slate board. Nor have the clean, clear writing and erasing qualities or easy maintenance of slate ever been duplicated. In fact, the unsurpassed smoothness of slate is the standard to which all other chalkboards are compared. Ageless in appearance, slate harmonizes with any color scheme, never "dates" the classroom. No wonder so many teachers request ... so many architects specify natural slate chalkboards for the best in visual classroom service!



PENNSYLVANIA SLATE PRODUCERS GUILD, INC.

205 Realty Building Pen Argy, Pennsylvania

500 million years in the making ... **NATURAL SLATE**

Fing-R-Gard Edge for Entrance Doors

A newly developed flexible vinyl plastic edge is now available for steel entrance doors. The Fing-R-Gard edge



protects against crushed fingers when caught in a closing door. At the same time, it is completely weatherproof and seals out cold, heat and moisture. Formed in the shape of a "U," the extruded vinyl plastic Fing-R-Gard edge is attached as an integral part of the door. **Overly Mfg. Co., Greensburg, Pa.**

For more details circle #342 on mailing card.

Gas Burners Feature Flexibility of Design

A new line of atmospheric type gas burners is now available for burning natural, manufactured or mixed gases. Great flexibility of design and capacity for almost universal use where requirements demand high input rating in limited space is possible because of the number and arrangement of nozzles in the new line. An ideal mixture of gas and primary air is created with the Ray Tandem-Jet Nozzles, and the Ray Flame Retention Ring stabilizes the flame at the burner tip for a smooth steady flame. The burners are virtually noiseless and electronic safety control equipment is standard. **Ray Oil Burner Co., 1301 San Jose Ave., San Francisco 12, Calif.**

For more details circle #343 on mailing card.

What's New ...

Tablet Arm Chair for Upper Grade Students

A tablet arm chair has been especially designed by Brunswick with upper ele-



mentary and secondary school children in mind. The unit, which has an adjustable tablet arm, is available in a 15 or 17 inch size to seat any student comfortably.

The chair features compact design to allow wider aisles in the classroom yet has an increased leg spread from front to rear for maximum balance. A side book rack welded to the frame provides ample storage space for books and the tablet arm can easily be disassembled from the support for storage. **Brunswick-Balke-Collender Co., 623 S. Wabash, Chicago 5.**

For more details circle #344 on mailing card.

Visual-Relief Map of South America

South America is the subject of the first wall map to be introduced in the Denoyer-Geppert Junior Series Visual-Relief maps of the continents. The new visual aid was designed especially for elementary classrooms but may be adapted for secondary and college use. The Visual-Relief technic combines shading with layer tints, resulting in a blend which yet retains distinct colors. Names of important places are readily visible on the 44 by 58 inch map. **Denoyer-Geppert Co., 5235 N. Ravenswood, Chicago 40.**

For more details circle #345 on mailing card.

Shuffleboard Set with Rubber Cushioned Discs

Jayfro Shuffleboard Sets are now offered with rubber cushioned discs. A solid band of rubber is permanently grooved around the disc to minimize breakage and noise during play.

Other equipment in the set includes lightweight aluminum cues, removable hardwood cue heads and plastic molded cue handles. **Jayfro Athletic Supply Co., P.O. Box 1065, New London, Conn.**

For more details circle #346 on mailing card.

Audio Visual Unit for Daylight Film Showing

The Cine Educator is a complete audio

visual unit with 16 mm projector, built-in screen, built-in speaker and storage space for reels, films and other equipment. The big 16 by 23 inch rear projection screen provides a bright sharp picture in any lighted room. The unit is mounted on heavy duty casters and can be easily moved for use in any classroom.

Operating controls are mounted on the top exterior part of the Cine Educator cabinet, enabling the teacher to stand in front of the class and point out important parts of the picture with full command of controls. The Cine Educator is 59 inches



high, 29 1/4 inches wide and 38 inches long, permitting easy access through a 30 inch door. **Busch Film and Equipment Co., Saginaw, Mich.**

For more details circle #347 on mailing card.

(Continued on page 196)



5000
school officials
were right!

about the
all-steel Atlas...

The ideal school pencil sharpener. More than five-thousand school officials asked for and received:

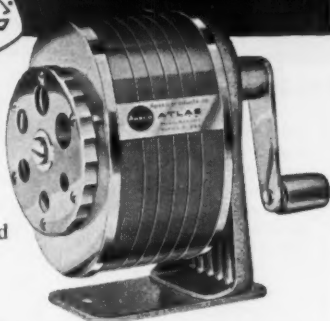
DURABILITY:
all-steel, even the
receptable.

DEPENDABILITY: perfect point every time.
EASY-TO-SERVICE: can be completely disassembled without removal of base from permanent installation. **APPEARANCE:** designed to harmonize with today's modern school construction. **PRICE:** low enough to allow adequate installations to meet all school requirements.

Write or see your Apsco dealer today!

Apsco products inc.

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Factories: Rockford, Ill. • Toronto, Canada



Everything for your cafeteria!

You can keep the food production—and serving line moving in your cafeteria or lunch room with DON supplies and equipment. Here's everything you need—from dishes—silverware, glassware, trays, paper goods, coffee urns, steam tables, dishwashers, food mixers to ranges.

EQUIPMENT — FURNISHINGS — SUPPLIES

For 40 years DON has supplied schools, industrial cafeterias, restaurants, hotels, hospitals and other institutions. Every item is sold on the basis of "Satisfaction Guaranteed or Money Back." This is your assurance of confidence and your insurance of satisfaction.

Write Dept. 16 for a DON salesman to call or visit our nearest display room.

EDWARD DON & COMPANY
GENERAL HEADQUARTERS—2201 S. LaSalle St.—Chicago 16, Ill.
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MAKE THE WASHING FACILITIES THE NO. 1 CONSIDERATION



Washroom adjoining cafeteria, Lake High School, Salisbury, Maryland. Architect, Edwin Wilson Booth. Bradley 54-in. Washfountains. Walls, pearl gray; Base, gloss black; Floor, sand buff; Textone Pavers.

- Foot-control eliminates all faucet contacts and maintenance
- Bowl is self-flushing—no collection of contaminating used water
- No water waste—removal of foot cuts water supply immediately
- Piping connections reduced 80%—installation costs cut
- Save 25 per cent floor space

Architects, building authorities, plumbing and engineering firms recommend Bradley . . . the most widely used sanitary washing facilities . . . Cat. 5601 mailed on request.

BRADLEY WASHFOUNTAIN CO., 2207 West Michigan Street, Milwaukee 1, Wisconsin

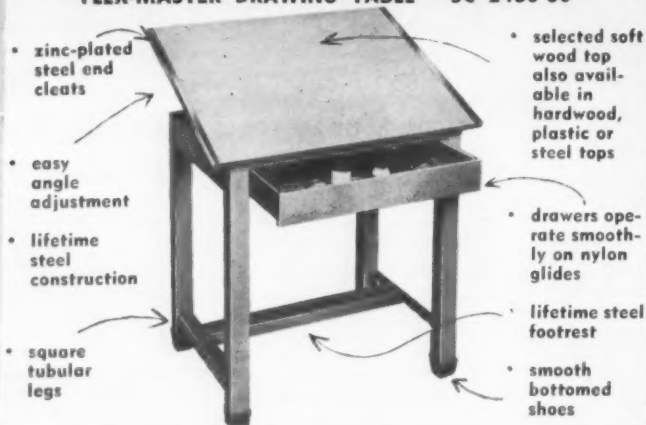
BRADLEY
Washfountains
Distributed Through
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STACOR EQUIPMENT

a better investment . . . for your students
... for your capital budget
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FLEX-MASTER DRAWING TABLE • SC 2430-30

Manufacturers of
Lifetime
Steel
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Cabinets,
Drafting
Tables,
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Tables, etc.
Dealer
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STACOR EQUIPMENT COMPANY
477 Tray Avenue, Brooklyn 3, New York



What's New ...

Hearing Aid Is Portable

The Maico Model MT-2 Hearing Aid is a desk-type portable hearing aid de-



signed especially for use by hard-of-hearing school children. The transistor-type unit eliminates the need for electric outlets and cords and frees children from possible electric shock. The battery-operated model is simple to use, making it readily available even for very young children. **Maico Co., Inc.**, 21 N. 3rd St., Minneapolis 1, Minn.

For more details circle #348 on mailing card.

Indoor-Outdoor Sweeper Facilitates Maintenance

Corridors, classrooms, auditoriums, grounds, playing fields, stadiums and other areas can be kept clean with minimum time and effort with the new MHD power sweepers. The MHD-36 has a 36-inch brush swath and will sweep up to 80,000 square feet in an hour. The MHD-48 has a 48-inch brush swath and will clean 100,000 square feet in an hour. A 12-inch side brush on the sweepers



cleans along walls and curbs, completing the sweeping in one operation.

The new Modern Power Sweeper models are easily handled and can be maneuvered easily around classroom or auditorium equipment indoors and between trees, shrubs and playground fixtures outdoors. The machines pick up fine dust particles as well as bulky debris, including leaves, grass cuttings and brush. They are ruggedly constructed with all-steel bodies and a heavy protective grill for long service. The driving mechanism is sturdy and requires minimum maintenance. **Modern Power Sweeper Co.**, 738 N. McKeever Ave., Azusa, Calif.

For more details circle #349 on mailing card.

(Continued on page 198)



SUPERIOR SCHOOL FURNITURE

Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, Tablet Arm Chairs, and Teachers Desk.

Also available with plastic surface.

Write for name of authorized distributor in your state.

WILLIAMS & BROWER, Incorporated
SILER CITY • NORTH CAROLINA

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HEARD AND SEEN?

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March Issue
of

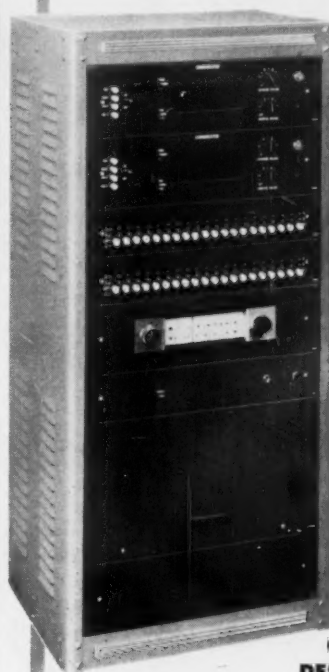
THE NATION'S SCHOOLS
919 N. MICHIGAN AVE., CHICAGO 11, ILL.

LATEST "SPACE-SAVER" DESIGN CENTRAL CONTROL, ALL-FACILITY SCHOOL SOUND SYSTEM

by

Rauland

MODEL S314
ULTRA-COMPACT
FOR USE IN MINI-
MUM SPACE—FOR
UP TO A TOTAL OF
40 CLASSROOMS



OFFERS EVERY DESIRABLE FACILITY

Here, at minimum cost and occupying very little more space than a file cabinet, is an invaluable aid for effective administrative control and a remarkable facility for instruction. Includes every modern feature and program facility:

- ★ Provides FM or AM radio programs for distribution to any or all rooms
- ★ Distributes phono program (4-Speed Automatic Changer)
- ★ Selects and distributes any of 2 Microphone, Radio or Phonograph programs
- ★ Provides 2-way conversation with any room. Distributes any 2 programs simultaneously (or one program plus intercom)
- ★ Has Emergency (All-Call) Feature

Write for full details covering the low-cost RAULAND "Space-Saver" School Sound System.

Rauland

Pioneers in
School Sound

Other RAULAND Systems are available with capacity up to 160 classrooms. RAULAND Public Address equipment is also available for auditorium and athletic field sound coverage.

WRITE FOR FULL DETAILS

RAULAND-BORG CORPORATION

Rauland-Borg Corporation
3515 Addison St., Dept. N, Chicago 18, Ill.
☐ Send full details on all RAULAND School Sound Systems.
We have _____ classrooms.

Name _____ Title _____
School _____
Address _____
City _____ Zone _____ State _____



MAKE THE WASHING FACILITIES THE NO. 1 CONSIDERATION



Washroom adjoining cafeteria, Lake High School, Salisbury, Maryland. Architect, Edwin Wilson Booth. Bradley 54-in. Washfountains. Walls, pearl gray; Base, gloss black; Floor, sand buff; Textone Pavers.

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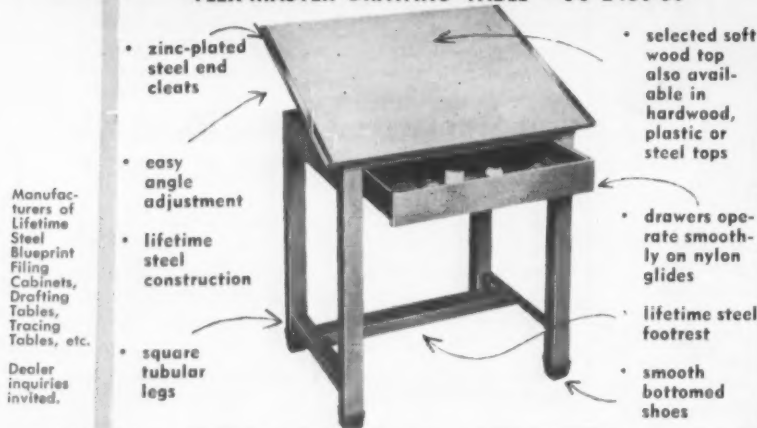
BRADLEY WASHFOUNTAIN CO., 2207 West Michigan Street, Milwaukee 1, Wisconsin

BRADLEY
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STACOR EQUIPMENT

a better investment . . . for your students
. . . for your capital budget
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Write today for NEW Catalog

STACOR EQUIPMENT COMPANY

477 Troy Avenue, Brooklyn 3, New York

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Also available with plastic surface.

Write for name of authorized distributor in your state.

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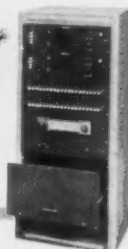
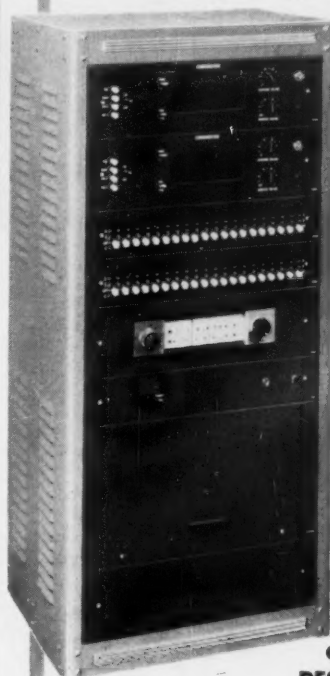
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by

Rauland

MODEL S314

ULTRA-COMPACT
FOR USE IN MINI-
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UP TO A TOTAL OF
40 CLASSROOMS



OFFERS EVERY DESIRABLE FACILITY

Here, at minimum cost and occupying very little more space than a file cabinet, is an invaluable aid for effective administrative control and a remarkable facility for instruction. Includes every modern feature and program facility:

- ★ Provides FM or AM radio programs for distribution to any or all rooms
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Rauland-Borg Corporation
3515 Addison St., Dept. N, Chicago 18, Ill.
☐ Send full details on all RAULAND School Sound Systems.
We have _____ classrooms.

Name _____ Title _____
School _____
Address _____
City _____ Zone _____ State _____

What's New ...



REPORT CARD

Califone Phonographs are fast becoming a must in every classroom with its 15 models providing the three R's as a basis of a solid education.

- Reliable Performance
- Rigid Construction
- Rhythm Control

The
Califone
COSMOPOLITAN
(14V-7)



School Net Price \$139.50

featuring:

- CONTINUOUS VARIABLE SPEED
- STROBESELECTOR SPEED CONTROL
- VOLUME FOR UP TO 1500 PERSONS

Write DEPT. NS-5
Califone
CORPORATION

1041 NORTH SYCAMORE AVENUE
HOLLYWOOD 38, CALIFORNIA

Fresh Citrus Fruit Sections Available in Gallon Jars

Fresh citrus fruit sections are now available in gallon jars for institutional use. The fruit is packed principally in Florida and sent to local markets under



refrigeration and is made available to institutions through local fruit broker or dairy. Varieties include orange, grapefruit, orange and grapefruit, and fruit salad which contains citrus fruits with pineapple, melon and maraschino cherries for color. Citrus fruit sections add taste variety to food service. **Florida Citrus Commission, Lakeland, Florida.**

For more details circle #350 on mailing card.

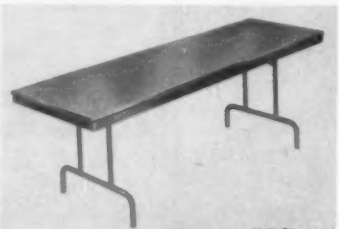
Wet-Dry Vacuum of Heavy-Duty Construction

Premier features heavy-duty construction for long-life in its new Model P-905 Master-Vac. The rugged steel tank finished in baked enamel holds 10 gallons liquid or one bushel dry dirt. The Master-Vac is 32 1/4 inches high, 21 1/2 inches in diameter weighing 38 pounds. A complete line of accessories is available. **Premier Co., 755 Woodlawn Ave., St. Paul 1, Minn.**

For more details circle #351 on mailing card.

Folding Table Has Fibersin Top

The Barricks 2100 Series Folding Tables have been introduced with "Supr-Lyte" tops made of Fibersin solid plastic. The surface resists fruit acids, burns, chipping, water and heat making the series practical for the hard-wear of institutional use. The tables are lightweight yet assure maximum seating capacity



with comfort and durability. The tables incorporate all the construction features of other Barricks tables, including the patented Leg Lock which permits fingertip opening and folding. **Barricks Mfg. Co., 134 W. 54th St., Chicago 9.**

For more details circle #352 on mailing card.

(Continued on page 200)

Announcing!

America's Most Modern
... Most Efficient

**Automatic
Hand and
Hair Dryer**



NEW!
Sani-Dri No. 12

Never Before So Many Exclusive Features!

Decorator Styling!—Designed by E. Burton Benjamin & Associates to blend perfectly with today's new fixtures... modernize old washrooms.

Faster Drying!—Increased air flow with improved heating element gives much greater drying efficiency.

Quieter... Safer!—Dynamically balanced motor and blower operate smoother and quieter...insulated plastic push bar completely protects user.

Less Maintenance Required!—Rugged Airflex timer gives longer service without repairs. Thermostatic motor protection eliminates fuse replacement.

More Economical, Too!—Revolutionary new heating element delivers more warm air with 33-1/3% less current consumption.

GUARANTEED 2 FULL YEARS



**Write Today for
New Brochure**
... SHOWS THE
COMPLETE LINE

Dependable Since 1897

THE CHICAGO HARDWARE FOUNDRY CO.
3327 Commonwealth Ave. • North Chicago, Ill.



A PLUS IN DESIGN

Years ahead . . . that's the designing secret of American Desk classroom furniture. For quality . . . durability . . . functionality . . . it's often imitated, but *never* duplicated. Take American Desk's Airplane Table and No. 44 Cluster Chair for example. Handsome and neat in appearance, this versatile unit is excellent for grouping elementary students in privacy without confusion or waste of space. Comes with either die-formed or tubular steel legs, steel frame and panels; tops are highly finished maple, birch or Fibre-plastic. Top sizes are 21" x 42"; 21" x 48"; 24" x 48".



american desk

MANUFACTURING CO.
TEMPLE, TEXAS

For Competent Assistance, Complete Details, Ask Your State AD Representative

What's New...

Liquid Porcelain Cleaner in Applicator Bottle



An unbreakable polyethylene bottle with attachable sponge rubber applicator is now available with Brulin's Bowlette

liquid compound for cleaning porcelain and vitreous ware. The new container is designed for easy handling. With the "Sponge-Spout" attached, Bowlette is dispensed by simply inverting the bottle over toilets and urinals and swabbing with the applicator. Waste is minimized and it is not necessary for the worker's hands to come in contact with the cleaning compound. Regular use of Bowlette is said to keep toilet fixtures clean and free from odor-causing bacteria. **Brulin & Co., Inc., 2939 Columbia Ave., Indianapolis 7, Ind.**

For more details circle #353 on mailing card.

Easy Cleaning and Long Wear for Loxitex Tackboards

Loxitex Tackboards offer a number of practical advantages not always found in this type of product. The surface of genuine Vicrtex vinyl-coated fabric is



laminated under high pressure to a treated pulpboard backing, permitting pins and tacks to go in easily and hold tight. The holes close when tacks are removed. The tackboards do not stain, crack, chip, peel or scratch and can be easily cleaned when necessary. The material is fire and soil-resistant and stays pliable and spongy under long, hard use.

Six fadeproof colors are available in the new Loxitex, including Limed White, Cinnabar Coral, Sand Tan, Celadon Blue, Sandalwood Brown and Willow Green. The Tackboards can be installed with or without trim, are economical in first cost and remain attractive and functional through years of use with minimum maintenance. **Loxit Systems, Inc., 1217 W. Washington Blvd., Chicago 7.**

For more details circle #354 on mailing card.



Quality of service UP... Costs drop \$200 with TURN-TOWLS

A SWITCH to Mosinee Turn-Towls from an ordinary, low-cost per case towel service brought these results for a school system in Michigan with an enrollment of 1,200 pupils:

TOWEL CONSUMPTION —
dropped 50%.

COST OF TOWEL SERVICE —
dropped from \$616 to
\$420 per school year.

Write for name of nearest
distributor



Mopping Bucket of Stainless Steel

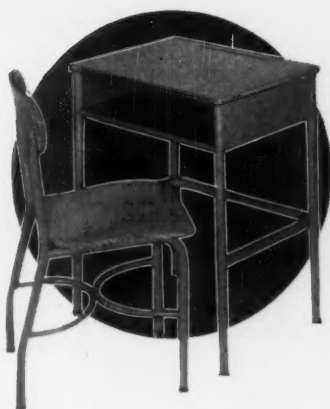


Heavy gauge stainless steel is used in the fabrication of the new Geerpres mopping bucket. All standard Geerpres features, such as welded construction and lightweight chassis with ball bearing rubber wheeled casters, are incorporated into the 32 quart bucket. The reenforced rim curls over heavy stainless steel wire. The bucket is polished for ease of cleaning and is completely corrosion-resistant and rust-free. **Geerpres Wringer, Inc., Muskegon, Mich.**

For more details circle #355 on mailing card.

(Continued on page 202)

- LONG LIFE
- COMFORT
- UTILITY



CLASSROOM FURNITURE

For new facilities, for replacement, BELA School Furniture deserves first consideration. Engineered for long years of service and to meet all school board specifications, BELA adheres to the same high standards of quality which have distinguished BELA Folding Chairs.

School officials, administrators and architects will find it advantageous to invite BELA to submit proposal on any installation.

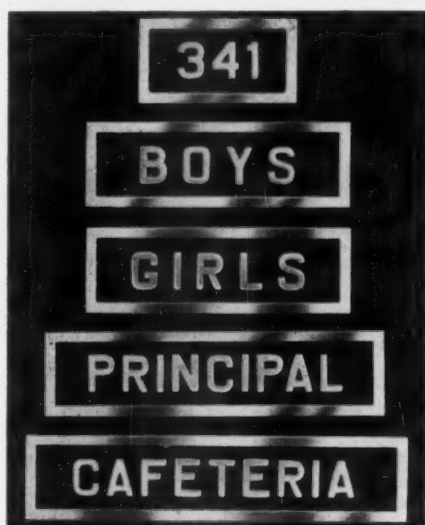


DIVISION

J. & J. TOOL & MACHINE
COMPANY

9505 S. PRAIRIE AVENUE, CHICAGO 28, ILL.

**Raised Letter
ALUMILITED ALUMINUM
SIGNS AND DOOR NUMBERS**



Our Low Prices Will Surprise You!
Ask For Our Style No. 870 "Enduro" SIGNS

SPENCER INDUSTRIES

1508 N. MASCHER ST.

PHILADELPHIA 22, PA.

DRY Hands QUICK!



-in less
than 30 seconds!



Hand Dryers
have replaced messy towels

WORLD—the air dryer that outsells all others. Used by such notables as *Mayo Clinic, Northwestern University, U. S. Army and Navy, Chrysler Corporation, Libby-Owens-Ford Glass, Sheraton Hotels, Greyhound Bus, Marquette University, Gulf Oil Co.* ...and thousands of others. Here's why:

Rugged, trouble-free **WORLD** Hand Dryers operate at *high speed*. Dry hands in a jiffy. End the expense and mess of towels; end littered floors and clogged toilets; can save up to \$600 per dryer per year!

The Dryer Proved Best by U. S. Government Test

MAIL THIS COUPON TODAY!



WORLD DRYER CORPORATION
616-22 W. Adams St., Chicago 6, Ill.

Gentlemen: Without obligation send me copies of letters from users, also folder of facts including cost-saving figures and full details on your **FREE-TRIAL** offer.

My name.....
Firm name.....
Street.....
City..... State.....

What's New ...

Micro Opaque Reader Accepts Any Micro Data

Micro data cards up to nine inches in one dimension and unlimited in the other are easily placed in position and moved from frame to frame with the new AO Micro Opaque Reader. Material faces up in plain view of the operator on the opaque reading screen which offers eye-reading comfort. The large screen is 11 by 12½ inches and has a 15 degree comfortable reading angle.

Other features of the reader include three easily interchangeable objectives, focus knob adjacent to operator, off-on



finger tip switch and foot switch available for photocopy timing. A cast steel frame for optics assures permanent optical alignment and fan cooling prevents heat damage to cards. The unit is finished in two-tone gray and charcoal baked-on wrinkle enamel and weighs only 23 pounds, making it readily portable. American Optical Co., Instrument Div., Buffalo 15, N.Y.

For more details circle #356 on mailing card.

Folding Tables by HOWE

SELF SUPPORTING STEEL CHASSIS not the top takes all the stress and strain. SOLID DOUBLE TOP (not frame) construction for extra strength.



HOWE
*Square Leg
Table*

All steel chassis. A brace at each leg for extra strength and a leg at each corner for engineering balance. Riveted and welded throughout. Choice of several different tops and sizes.

All steel chassis with retracting leg fold. Strong, fool-proof lock with self-tightening principle. Two separate braces for each pair of legs. Braces are riveted to chassis. Choice of several different tops and sizes.



HOWE
*Pedestal Leg
Table*



HOWE
*Bench and Table
Combination*

Dimensions: Table—30" x 72" x 27" high. Benches—9½" x 72" x 16" high. Folded position—17½" x 72" x 38½" high.

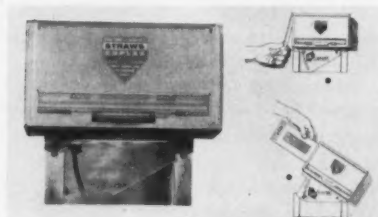
See us at the A.A.S.A. Convention, Atlantic City, Feb. 15-21

BOOTH No. 1339-41

HOWE FOLDING FURNITURE, INC. ONE PARK AVE. • NEW YORK 16, N.Y.

Pre-Assembled Bracket for Duplex Dispensers

A new all-purpose bracket, pre-assembled and ready for mounting, is now offered for Duplex Straw Dispensers. The dispensers can be easily attached to vending machines, mobile food trucks and walls with the new bracket. Duplex Straw Dispensers dispense unwrapped



straws in all sizes and have approval of health boards.

The dispenser is easily mounted to the bracket without the use of tools. With the stainless steel bracket, the Duplex Dispenser can be loaded with straws without being touched by human hands. The new Duplex all-purpose bracket comes complete with hardware. Duplex Straw Dispenser Co., Dept. 24, 511 N. La Cienega Blvd., Los Angeles 48, Calif.

For more details circle #357 on mailing card.

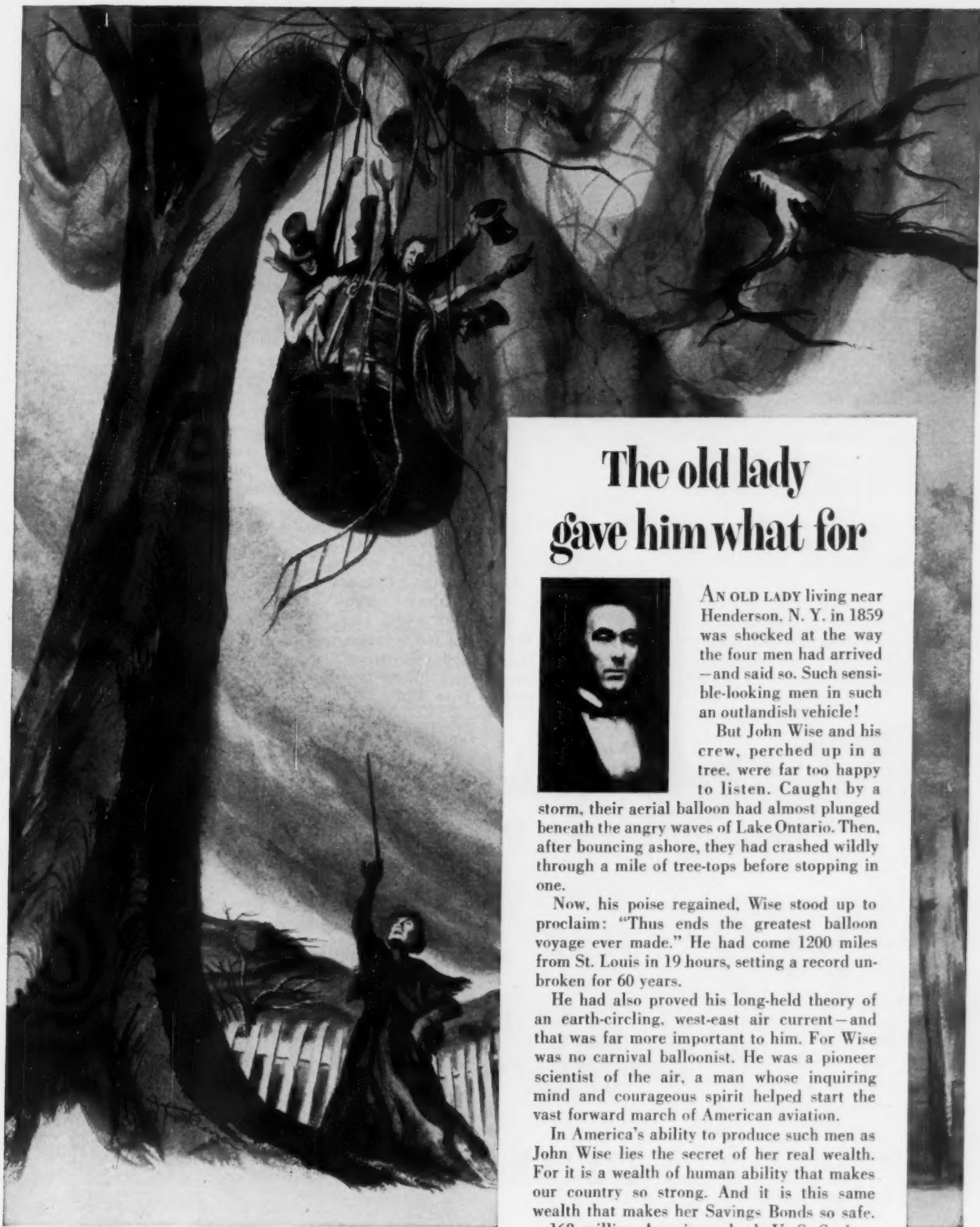
Cleaner for Stainless Steel Leaves Stain Resistant Coating

Spots, finger prints and stains are easily removed from stainless steel and Monel with Lac-O-Nu Metal Cleaner. At the same time it leaves a clean, hard, stain-resistant finish which is readily cleaned by wiping with a clean cloth or one dampened with Lac-O-Nu. The new solvent cleaner can also be used to remove stains and spots from plastic and leatherette without damage to the color or finish, according to the report. The product was developed by the Research Laboratories of Armco Steel Corporation.

For heavy duty cleaning Nu-Steel #A150 is said to remove lime stains from dishwashers and coffee urns and heat tints and carbonized areas on stainless steel. United States Pumice Supply Co., Inc., 6331 Hollywood Blvd., Los Angeles 28, Calif.

For more details circle #358 on mailing card.

(Continued on page 204)



Picture of John Wise from AMERICAN HERITAGE

The old lady gave him what for



AN OLD LADY living near Henderson, N. Y. in 1859 was shocked at the way the four men had arrived—and said so. Such sensible-looking men in such an outlandish vehicle!

But John Wise and his crew, perched up in a tree, were far too happy to listen. Caught by a storm, their aerial balloon had almost plunged beneath the angry waves of Lake Ontario. Then, after bouncing ashore, they had crashed wildly through a mile of tree-tops before stopping in one.

Now, his poise regained, Wise stood up to proclaim: "Thus ends the greatest balloon voyage ever made." He had come 1200 miles from St. Louis in 19 hours, setting a record unbroken for 60 years.

He had also proved his long-held theory of an earth-circling, west-east air current—and that was far more important to him. For Wise was no carnival balloonist. He was a pioneer scientist of the air, a man whose inquiring mind and courageous spirit helped start the vast forward march of American aviation.

In America's ability to produce such men as John Wise lies the secret of her real wealth. For it is a wealth of human ability that makes our country so strong. And it is this same wealth that makes her Savings Bonds so safe.

168 million Americans back U. S. Savings Bonds—back them with the best guarantee you could possibly have. Your principal guaranteed safe to any amount—your interest guaranteed sure—by the greatest nation on earth. If you want *real* security, buy U. S. Savings Bonds at your bank or through the Payroll Savings Plan where you work. And hold on to them.



**PART OF EVERY AMERICAN'S SAVINGS
BELONGS IN U. S. SAVINGS BONDS**

The U. S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America.

What's New ...

Literature and Services

• **Grade-Aid classroom furniture and equipment for primary and grammar schools** is described and illustrated in a new four-page folder published by the Grade-Aid Division of Colonial Engineering Co., Inc., Cambridge 38, Mass. The two-color folder describes the functional features of Grade-Aid modular all-steel classroom sinks, work counters, storage cabinets and other equipment, with illustrations showing how the units can be grouped in any desired arrangement. Cut-away drawings, complete measurements and other specifications are shown in the brochure.

For more details circle #359 on mailing card.

• **Floor Maintenance Equipment and Supplies** available from Finnell System, Inc., 200 East St., Elkhart, Ind., are covered in a new Finnell four-page folder. The folder describes and illustrates the complete line, including a new heavy duty vacuum cleaner.

For more details circle #360 on mailing card.

• A four-page folder on "Vollrath Ware, Finest Stainless Steel for the School Lunchroom and Home Economics Classroom" is available from The Vollrath Company, Sheboygan, Wis. It pictures and describes Vollrath stainless steel cooking utensils and kitchenware and porcelain enameled ware for school use.

For more details circle #361 on mailing card.

• How GPL ii-TV is applicable for observation, magnification, instruction and control in institutional and industrial situations is told in a new brochure released by General Precision Laboratory, 63 Bedford Rd., Pleasantville, N.Y. The leaflet discusses the four basic camera units for indoor and outdoor use, control and switch units and monitors and illustrates typical applications.

For more details circle #362 on mailing card.

• A report on **Soviet Russia today** is presented in a paper bound book published by the National Cash Register Co., Dayton 9, Ohio. Profusely illustrated with photographs in color and black and white, the booklet tells the story of a recent tour of the Soviet Union. The informative publication presents interesting material on the Russian people, their cities, their living standard, their culture and religion, their stores and other subjects, as seen by an American business man on a visit to Russia.

For more details circle #363 on mailing card.

• **The General Film Catalog for 1956-1958** compiled by the Bureau of Audio-Visual Instruction, Extension Division, University of Colorado, Boulder, Colo., is now available. The 128 page **Extension Bulletin** gives descriptive information and costs on the hundreds of sound films available from the Bureau and is indexed alphabetically and by subject matter.

For more details circle #364 on mailing card.

• The advantages of three methods of hot water perimeter piping systems for classroom unit ventilators are cleverly told by color and cartoons in **Form 600-A9**. Prepared by American Air Filter Co., Louisville 8, Ky., the booklet shows how each method successfully fills any individual requirement.

For more details circle #365 on mailing card.

• A folder with helpful guidance information is available from the Hammond Organ Company, 4200 W. Diversey, Chicago 39. Entitled "**Opportunity Keys With Organ Music**," the 12-page booklet outlines a variety of career opportunities available in a number of fields through the electric organ.

For more details circle #366 on mailing card.

• "**Delkote Developments for School Use**" are described in a new catalog released by Delkote, Inc., 1419 Faulk Rd., Wilmington, Del. Suggestions on how Delkote adhesives, finishes, lacquers, cleaners and preservatives can be used in the classroom, library and school shop, and in plant maintenance are included.

For more details circle #367 on mailing card.

• Nearly 200 16 mm sound films available on free loan are described in the "**Pocket Guide to Free Films**." The booklet is available from Modern Talking Picture Service, Inc., 3 E. 54th St., New York 22.

For more details circle #368 on mailing card.

(Continued on page 206)



ATLANTIC CITY
FEB. 15-20, 1957



Really

SEE WHAT'S A NEW IN LIBRARY FURNITURE

At BOOTH 1233-1235-1237-1239
Lower Level, Convention Hall.

Over Myrtle Desk Company's complete, new
line of Mid-century Library Furniture.

To the favorable comments of Mid-century
dealers and satisfied users alike.

Come...and Welcome!

MYRTLE DESK COMPANY

HIGH POINT, NORTH CAROLINA

Now you can get **MAINTENANCE-FREE** bleachers
... at no extra cost



They're GALVANIZED!

With an Arrow Bleacher installation, you can say "Goodbye" to the costs and chores of maintaining your outdoor bleachers. Arrow Bleachers are the only bleachers that are *dichromate galvanized*—covered with a smooth, long-lasting protective coating on all structural steel members. This virtually eliminates rust and the nuisance of costly periodic painting. Arrow Bleachers feature 24-inch back-to-back spacing, assuring you maximum in seating capacity. They are designed to conform to rigid safety requirements using only channel and angle construction. Planning a bleacher installation? Specify Arrow Bleachers.

Visit us at Booth No. 1462 A.A.S.A. Convention
Atlantic City, New Jersey
Feb. 15-20, 1957

ARROW
BLEACHER COMPANY
Zelienople, Pa.

Division of UNIVERSAL MANUFACTURING CORP.
World's Largest Manufacturer of Steel-Panel Scaffolding

CONNOR

forest products since 1872

"LAYTITE" maple
birch
oak **FLOORING**

has been first choice for gyms,
play rooms and class rooms

"CONTINUOUS STRIP", Blocks,
Regular Strips and Slats

School and Gym Floors Our Specialty

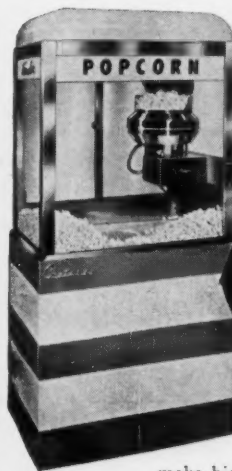
MFMA grades and trade marked

See Sweet's file specs # $\frac{13J}{Co}$

CONNOR LUMBER & LAND CO.

P.O. BOX 810-A, WAUSAU, WIS.

Phone No. 2-2091



**Need extra
funds?**

**MAKE BIG PROFITS
FROM POPCORN
WITH A CRETORS**

If your school has an athletic program or any other crowd-gathering activities, you can make big profits popping and selling wholesome popcorn with a CRETORS machine . . . The new CRETORS "Holiday" Floor Model (illustrated) can turn out \$30.00 worth of popped corn per hour . . . No special wiring required. Anybody can operate . . . Many other models available, including "Holiday" Counter Model.

Cretors **POPCORN MACHINES**
since 1885

SALES OFFICES: CRETORS, Popcorn Bldg., Nashville, Tenn.
FACTORY: Chicago, Ill. Distributors Coast to Coast
IN CANADA: Super Puff't Ltd., Toronto • Theatre Confections Ltd.,
Toronto • Service Confections, Ltd., Winnipeg.

What's New ...

• "Arts and Crafts Furniture" is the subject of the attractive Catalog 219 released by Hamilton Mfg. Co., Two Rivers, Wis. The 64-page book has four-color printing on the inside covers, showing the finishes and colors in which the furniture is offered. Attractive line drawings picture the many items in the line and full descriptive information on storage units, mechanical drawing, shop and service equipment, as well as data on tops are included. The catalog also has several pages of suggested floor plans for various types of arts and crafts rooms.

For more details circle #369 on mailing card.

• A new engineering specification handbook on Lawler Thermostatic Control Valves is available from Lawler Automatic Controls, Inc., Mt. Vernon, N.Y. Bulletin M-3 includes application information, graphs, diagrams and layouts.

For more details circle #370 on mailing card.

• Complete information on the specialized engineering services provided to architects and administrators by J. E. Stephens Associates, Inc., 116 Delaware, Detroit 2, Mich., is available in a new 40 page brochure on "Food Facilities Engineering."

For more details circle #371 on mailing card.



Are you Satisfied with your Vision Screening Program?

If not, the Keystone Visual-Survey Service is the answer.

It is the result of 22 years of experience and development.

The equipment is simple and compact, and the tests are open and easy to administer.

KEYSTONE Visual-Survey Service

In addition to the standard service affording tests for Far and Near Usable-Vision, Lateral and Vertical Balance, Fusion, Depth Perception and Color Perception, there are the following special tests:

The Visual-Survey Short Tests.....	4 cards
The Preschool Test.....	1 card
The Ready-to-Read Tests.....	3 cards
The Plus-Lens Test.....	1 card
The Spache Reading Test.....	4 cards

Keystone View Co., Meadville, Pa.

- () Please send information on Keystone Visual-Survey Service.
() Please phone or write and set time for a demonstration.

(Name) _____

(School) _____ (City) _____

• Three national organizations have cooperated in the publication of a new booklet on the steps involved in establishing and operating an educational television station. Entitled "Educational TV for Your Community," the booklet discusses costs of establishing a station, presents the results of studies of present stations and indicates staff needs. Published by the Educational Television and Radio Center, 1610 Washtenaw, Ann Arbor, Mich., jointly with the Joint Council on Educational Television, Washington, D.C., and the National Association of Educational Broadcasters, Champaign-Urbana, Ill., the booklet describes the programs now being seen on educational television. It discusses the training possible through this medium, actual programs and courses within schools, and the steps necessary to activation of one of the 258 TV channels reserved for educational television.

For more details circle #372 on mailing card.

• A 12-page brochure, Edition 43, on "Ellison the Balanced Door" is available from Ellison Bronze Co., Inc., Jamestown, N. Y. The simple door control mechanism is described and design possibilities are suggested through the use of photographs of installations.

For more details circle #373 on mailing card.

• The "MagneMite Series" portable tape recorders are described in a new folder available from Amplifier Corp. of America, 398 Broadway, New York 13. Performance characteristics and mechanical details of 15 models of the battery-operated, spring-motor magnetic tape recorders are explained.

For more details circle #374 on mailing card.

• Multi-Purpose Power Shop Machines are described in a new 20-page booklet offered by DeWalt Inc., Lancaster, Pa. Photographs describe the many applications of the basic radial arm type machines together with detailed data and a listing of available tools and attachments.

For more details circle #375 on mailing card.

• A free filmstrip, "An Introduction to Rubber," describes rubber from trees as well as man-made rubber and is available from Teachers Library, Inc., 1790 Broadway, New York 19. Sponsored by the U. S. Rubber Co., it is non-commercial in nature and is accompanied by a Teachers Guide.

For more details circle #376 on mailing card.

• Information on the "2200 3-in-1 Plugmold Electrified Baseboard" is given in a new eight-page circular available from The Wiremold Co., Hartford 10, Conn. Known as Form 590, the folder illustrates and describes the wide application of 2200 Plugmold where multiple electrical outlets and additional circuits are needed.

For more details circle #377 on mailing card.

(Continued on page 208)



Nesbitt "package" consists of unit ventilator (center), with finned-tube radiation housed in grilled casings (pictured) or open or closed storage cabinets.

Nesbitt Syncretizers with Wind•O•Line Radiation protect student health, cut fuel bills

Cold downdrafts from windows are often a hazard for students and teachers — may result in costly absenteeism. You can eliminate this problem simply, efficiently with Nesbitt Syncretizers with Wind•O•Line Radiation.

Attractive Nesbitt Syncretizers with Wind•O•Line send up a blanket of warmth, tempering the "wall of ice" around windows, deflecting downdrafts upwards over students' heads. Blending the right amount of fresh outside air, the Syncretizer circulates the air, increasing student performance while it protects their health. Wind•O•Line's finned tubes extend the

blanket of warmth the length of the windows.

Warming downdrafts and cold glass surfaces, Nesbitt Syncretizers with Wind•O•Line Radiation relieve your fuel system, cutting fuel bills.

For complete data and prices on American Blower's line of products for schools — from Syncretizers to Ventilating Fans, Unit Heaters and Power Roof Ventilators — contact our nearest branch office, or write direct. American Blower Division of American-Standard, Detroit 32, Michigan. In Canada: Canadian Sirocco products.

AMERICAN BLOWER

Division of **AMERICAN-Standard**





COOKING AND SEWING ROOM FURNITURE

For more than sixty years Peterson furniture has set the pace for style and design. Peterson engineers and leading educators, studying together the requirements of school furniture under actual working conditions, have built into each piece of equipment a quality and workability that has made Peterson the leading choice of educators for many years.

Our representative will gladly assist in any problem you may have . . . or if you prefer, write on your letterhead for our illustrated catalog.

LEONARD PETERSON & CO., INC.

1226 FULLERTON AVENUE, CHICAGO 14, ILLINOIS



**You Ask For It
Now We Have It**

BIG 64 INCH WALL MAPS WORLD and UNITED STATES

**CRAM World Globes
Maps, Charts and
Atlases • Graded Teaching Aids**

Send for NEW catalog No. 90



THE GEORGE F. CRAM COMPANY, INC.
730 EAST WASHINGTON STREET - INDIANAPOLIS 7, INDIANA



What's New ...

- Allied's 1956 Electronics Catalog includes a large selection on radio, TV and electronic parts and equipment for school use. Catalog No. 160 contains 356 pages listing over 27,000 items, including Knight Electronic Kits, public address amplifiers and Hi-Fi equipment. The catalog is available from Allied Radio Corp., 100 N. Western Ave., Chicago 80. For more details circle #378 on mailing card.

- The new AMF Lowerator Mobile Refrigerated Milk Carton and Bottle Dispenser is described and illustrated in a four-page folder offered by American Machine & Foundry Co., 261 Madison Ave., New York 16. How the new dispenser provides automatic dispensing at convenient counter level of half-pint milk cartons or bottles, how it can be wheeled to any desired position, and how it accommodates milk cartons or bottles of any shape or size are some of the details covered.

For more details circle #379 on mailing card.

- Educators as well as dentists are offered a full-color "Trans-Vision" Wall Chart by the Bureau of Dental Health Education of the American Dental Association, 22 E. Superior St., Chicago 11. The 10-page chart is designed to be hung on a wall and shows numerous dental conditions and what can be done to correct them. Double acetate pages are used in the chart to permit comparison between normal and abnormal conditions.

For more details circle #380 on mailing card.

- Trion Electronic Air Cleaners for installation in ventilating system air returns for dirt removal are described in a catalog available from Trion, Inc., 1000 Island Ave., McKees Rocks, Pa. The new 12-page booklet also contains complete engineering data, size and capacity tables and component parts information of particular interest to engineers and architects.

For more details circle #381 on mailing card.

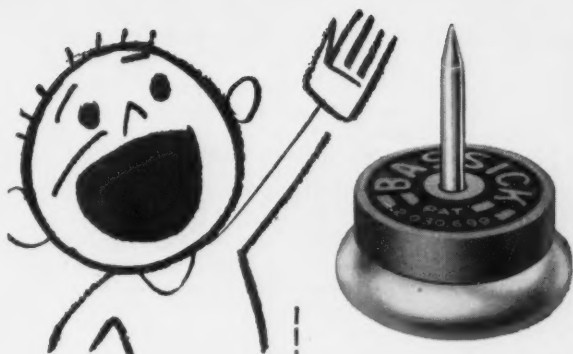
- Nabisco has published a new booklet on its complete line of individual service varieties available to the institutional fields. Entitled "It Costs So Little to Serve the Best," the booklet includes service suggestions and cost per serving, and is available from National Biscuit Co., 449 W. 14th St., New York 14.

For more details circle #382 on mailing card.

- Records to accompany the filmstrip series, "Stories of Music Classics," are now provided by The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, Mich. The individual classics in the music appreciation series include Sleeping Beauty, William Tell, Midsummer Night's Dream, Swan Lake, Bartered Bride and Scheherazade. One side of the record adapts the musical selection to follow the filmstrip story while the second side presents the full orchestral rendition.

For more details circle #383 on mailing card.

(Continued on page 210)



Noise maker

Classroom clamor comes in two kinds: First the natural noise of normal children too healthy, too interested, too eager to learn to keep quiet.

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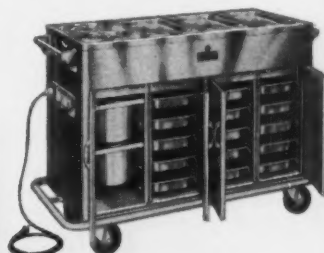
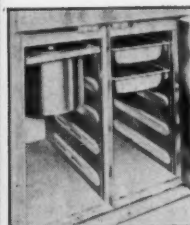
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- How congested areas can use power sweeping is told in a new booklet entitled "Can We Use Mechanized Sweeping Profitably?" Issued by G. H. Tennant Co., 2526 N. 2nd St., Minneapolis 11, Minn., the booklet discusses aisle widths, dust control, possible cost savings and includes a check-list to pre-determine the advantages of a sweeper's usefulness.

For more details circle #384 on mailing card.

- Information on Documentary Films About Britain and the Commonwealth is contained in a catalog prepared by British Information Services, 30 Rockefeller Plaza, New York 20. The 24-page booklet describes nearly one hundred 16 mm sound films available in black and white and color.

For more details circle #385 on mailing card.

- The new edition of "The Audio-Visual Equipment Directory" is now available from the National Audio-Visual Assn., 2540 Eastwood Ave., Evanston, Ill. It serves as a guide to all kinds of current A-V equipment and includes photographs of 447 separate models with complete specifications and prices for each. The 200-page directory sells at \$4.25 per copy.

For more details circle #386 on mailing card.

Film Releases

"Experiments in Organic Chemistry," set of four separate films. "Ways of the

Navaho" portrays adaption of the Navaho to old and new cultures. Elementary science filmstrip series, "Plants and Animals" and "Elementary Science Set No. 5." "Farm and City Series" primary filmstrip set. **Young America Films Inc., 18 E. 41st St., New York 17.**

For more details circle #387 on mailing card.

"Whys of Elementary Science, Set I," color filmstrips for grades 1 to 4. "Learning New Numbers—Fractions," color filmstrip set relates each fraction fact to whole number facts previously learned. **Filmstrip House, 347 Madison Ave., New York 17.**

For more details circle #388 on mailing card.

"Appointment with Youth" film dramatizes the work of a teacher and how he fulfills the role of a good teacher. **McGraw-Hill Book Co., Text-Film Dept., 330 W. 42nd St., New York 36.**

For more details circle #389 on mailing card.

"Colonialism in Retreat," current affairs filmstrip describes surge toward independence in colonial areas and the issues faced by the U. S. as a result. **The New York Times, Office of Educational Activities, Times Square, New York 36.**

For more details circle #390 on mailing card.

"Conducting Good Music," "Our World of Science," "A Visit to the Waterworks" and "Seed Dispersal," all 16 mm sound in color or black and white. "World

War II" and "Roger Williams," in black and white only. "The Far Western States," six filmstrips in color. **Encyclopaedia Britannica Films, 1150 Wilmette Ave., Wilmette, Ill.**

For more details circle #391 on mailing card.

"Private War of Major Benson," "Francis in the Navy" and "One Desire," Universal-International feature films now available in 16 mm sound. **United World Films, Inc., 1445 Park, New York 29.**

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Suppliers' News

Meterflo Dispensers, formerly of 627 Grove St., Evanston, Ill., manufacturer of a complete line of stainless steel cabinet dispensers, floor and counter models for the automatic portion controlled delivery of bulk milk, fruit juices and other refrigerated liquids, announces the opening of new offices and company headquarters at 2534 S. 11th St., Niles, Mich.

Syracuse China Corporation, Division of Onondaga Pottery Co., 1858 W. Fayette St., Syracuse 4, N.Y., is the new name style for this manufacturer of Syracuse China. The change has been made to avoid confusion in the use of the brand name of Syracuse China which has been produced by Onondaga Pottery Company for more than sixty years.



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PRODUCT INFORMATION

Index to "What's New"

Pages 177-210

Page		Page		Page	
313	"Portable of Tomorrow" Haldeman-Homme Mfg. Co.	319	Attenderdicer Robert E. Tompkins, Inc.	366	"Keys with Organ Music" Hammond Organ Co.
314	Restyled Kallitron United States Plywood Corp.	340	Jari Junior with Snowthrower Jari Products, Inc.	367	"Developments for School Use" Deikote, Inc.
315	Basketball Scoreboard Naden Industries	341	Motorized Microfilm Reader Recordak Corp.	368	Pocket Guide to Free Films Modern Talking Picture Service, Inc.
316	Floor Maintainer Clarke Sanding Machine Co.	342	Fino-R-Gard Edge Overline Div., Overly Mfg. Co.	369	"Arts and Crafts Furniture" Hamilton Mfg. Co.
317	Building Panels Teclab, Inc.	343	Atmospheric-Type Gas Burners Ray Oil Burner Co.	370	Bulletin M-3 Lawless Automatic Controls, Inc.
318	Film-A-Record Remington Rand, Div. of Sperry Rand Corp.	344	Adjustable Tablet-Arm Chair Brunswick Balke-Collider Co.	371	"Food Facilities Engineering" J. E. Stephens Associates, Inc.
319	Portable Table and Bench Sico Mfg. Co., Inc.	345	Relief Map of South America Denoyer-Geppert Co.	372	"TV for Your Community" Educational TV and Radio Center
320	Instant Dry Milk Pet Milk Co.	346	Shuffleboard Sets Joytro Athletic Supply Co.	373	"Ellison the Balanced Door" Ellison Bronze Co., Inc.
321	Apple Flavor Base S. Gumpert Co. Inc.	347	Cine Educator Busch Film & Equipment Co.	374	Brochure Amplifier Corp. of America
322	Juvenile Size Folding Chairs Hampton Specialty Products, Inc.	348	Hearing Aid Malco Co., Inc.	375	Power Shop Machines Booklet DeWalt, Inc.
323	Fresco Acoustical Tile Owens-Corning Fiberglas Corp.	349	Power Sweepers Modern Power Sweeper Co.	376	"An Introduction to Rubber" Teachers Library, Inc.
324	Juvenile Height Compartments The Mills Co.	350	Citrus Fruit in Jars Florida Citrus Commission	377	Form 590 The Wiremold Co.
325	Shop Drawing Unit Standard Pressed Steel Co.	351	Master-Vac Premier Co.	378	Catalog 160 Allied Radio Corp.
326	Recessed Troffers The Edwin F. Guth Co.	352	Folding Tables Barricks Mfg. Co.	379	Milk Dispenser Folder American Machine & Foundry Co.
327	Calculating Machine Monroe Calculating Machine Co.	353	Bowlette with Applicator Burlin & Co., Inc.	380	"Trans-Vision" Wall Chart American Dental Assn.
328	Adjustable Posture Chairs Hardware Engineering Co., Inc.	354	Laxiter Tackboard Loxit Systems, Inc.	381	Catalog Trilon, Inc.
329	E-Z Viewer Society for Visual Education, Inc.	355	Stainless Steel Bucket Geopres Writzer, Inc.	382	Booklet National Biscuit Co.
330	Melmac Plastic Dinnerware Sutton China Co.	356	Micro Opaque Reader American Optical Co.	383	"Stories of Music Classics" The Jam Handy Organisation
331	Louvered Folding Doors Fenster Inc.	357	All-Purpose Dispenser Bracket Duplex Straw Dispenser Co.	384	Booklet G. H. Tennant Co.
332	Portable Water Caddy Behrens Mfg. Co.	358	Lao-O-Nu Metal Container U.S. Pumice Supply Co., Inc.	385	Documentary Film Catalog British Information Services
333	Prismalume Controls Holophane Co., Inc.	359	Equipment Catalog Grade-Aid Div., Colonial Engineering Co., Inc.	386	A-V Equipment Directory National Audio-Visual Assn.
334	Locker Rack Lyon Metal Products, Inc.	360	Floor Maintenance Folder Pinnell System, Inc.	387	Film Releases Young America Films Inc.
335	Amesart Paint Applicator Binney & Smith, Inc.	361	"Vollrath Ware for Schools" The Vollrath Co.	388	Filmstrip Releases Filmstrip House
336	Liquid-Diet Oakite Products, Inc.	362	GVL II-TV Brochure General Precision Laboratory, Inc.	389	"Appointment with Youth" McGraw-Hill Book Co.
337	Commander Phonograph Callione Corp.	363	"U.S.S.R.—1956" The National Cash Register Co.	390	"Colonialism in Retreat" The New York Times
338	Movable Rolling Gymstands Wayne Iron Works	364	General Film Catalog Bureau of Audio-Visual Instruction	391	Film Releases Encyclopaedia Britannica Films
		365	Form 500-A5 American Air Filter Co., Inc.	392	Film Releases United World Films, Inc.

Index to Products Advertised

Key	Page	Key	Page	Key	Page
393	Acorn Wire & Iron Works Folding Gates.....209	403	American Seating Company School Seating.....following page 146	413	Blakeslee & Company, G. E. Kitchen Machines.....133
394	Adams & Westlake Company Aluminum Windows.....7	404	Ampro Corporation Tape Recorder & Projector.....141	414	Bogen Company, Inc., David Sound System.....106
395	Allied Radio Corporation Catalog.....172	405	Apaco Products Inc. Pencil Sharpener.....185	415	Bonton Molding Company Dinnerware.....110
396	All-Steel Equipment Inc. School Furniture.....following page 146	406	Arrow Bleacher Company Bleachers.....205	416	Bradley Washfountain Company Wash Fixtures.....106
397	American Air Filter Co., Inc. Unit Ventilator Products.....23, 24, 25, 26	407	Bassick Company Casters.....200	417	Brunswick-Balke-Collider Company School Furniture.....following page 52
398	American Bitumuls & Asphalt Company Playground Surfacing Material.....189	408	Bausch & Lomb Optical Company Microscopes.....174	418	Burroughs Corporation Cash Register.....151
399	American Blower Corporation Unit Ventilator Products.....207	409	Bay West Paper Company Paper Towels & Dispenser.....200	419	Callione Corporation Phonograph.....139
400	American Crayon Company Art Materials.....183	410	Beckley-Cordy Company Window Shades.....94	420	Celotex Corporation Acoustical Material.....17
401	American Desk Mfg. Company Classroom Furniture.....189	411	Bell & Howell Company Projectors.....107	421	Central Scientific Company Teaching Aids.....8
402	American Gas Association Gas Cooking Equipment.....150, 159	412	Deand-Westinghouse Automotive Air Brake Co. Air Brakes.....5	422	Certified Equipment Manufacturers Ballasts.....Cover 3

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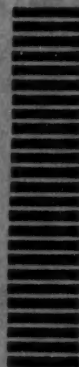
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Index to Products Advertised—Continued

Key	Page	Key	Page	Key	Page
423 Chesapeake and Ohio Railway Company Bituminous Coal.....	183	470 Hobart Mfg. Company Kitchen Machines.....	117	516 Peabody Seating Company Classroom Furniture.....	13
424 Chevrolet Division School Bus Chassis.....	125	471 Holcomb Mfg. Company, J. I. Maintenance Products.....	28	517 Pennsylvania Slate Producers Guild Inc. Chalkboards.....	194
425 Chicago Hardware Foundry Company Hand Dryer.....	188	472 Holden Patent Book Cover Company Book Covers.....	147	518 Petersen & Company, Leonard Laboratory Equipment.....	308
426 Claridge Products & Equipment Co. Chalkboards.....	163	473 Howe Folding Furniture, Inc. School Furniture.....	302	519 Pittsburgh Plate Glass Company Window Glass.....	126, 127
427 Clarke Sanding Machine Company Floor Maintenance.....	2	474 Hubbell, Inc., Harvey Wiring System.....	110	520 Pittsburgh Plate Glass Company Paint.....	following page 148
428 Coffey Company, Jack C. Film Storage Unit.....	190	475 Hunt Pen Company, C. Howard Pencil Sharpeners.....	32	522 Radio Corporation Of America Sound System.....	164, 165
429 Columbia-Geneva Steel Division Structural Steel.....	144, 145	476 Huntington Laboratories, Inc. Floor Maintenance.....	121	523 Rauland-Borg Corporation Sound System.....	197
430 Compton & Company, F. E. Encyclopedia.....	Cover 4	477 International Business Machines Corporation Typewriters.....	133	524 Reliance Chemicals Corporation Plumbing Maintenance.....	188
431 Connor Lumber & Land Company Maple Flooring.....	205	478 International Harvester Company School Bus Chassis.....	14, 15	525 Remington Rand Inc. Typewriter.....	30
432 Cram Company, Inc., George F. Teaching Aids.....	208	479 International School Seating Division of Union City Body Co., Inc. School Seating.....	100	526 Richards-Wilcox Mfg. Company Classroom Wardrobes.....	185
433 Crestors Corporation Popcorn Machines.....	205	480 Irwin Seating Company School Furniture.....	105	527 Robbins Flooring Company Maple Flooring.....	132
434 Crow Electric-Craft Teaching Aids.....	174	481 J & J Tool and Machine Company Classroom Furniture.....	201	528 Rowles Company, E. W. A. Chalkboards.....	154
435 Curtis Lighting, Inc. School Lighting.....	149	482 Jennison-Wright Corporation Flooring Material.....	39	529 Royal Typewriter Co., Division of Royal McBee Corp. Typewriter.....	155
436 Day-Brite Lighting, Inc. School Lighting.....	99	483 Johns-Manville Acoustical Material.....	157	530 St. Charles Mfg. Company Homemaking Classroom Equipment.....	34
437 Dettra Flag Company, Inc. Flags.....	186	484 Johnson Service Company Temperature Control.....	20, 21	531 Schieber Sales Company Folding Table & Bench Unit.....	53
438 Devco & Reynolds Co., Inc. Paint.....	183	485 Kewaunee Mfg. Company Laboratory Furniture.....	168	532 Sexton & Company, John Institutional Food.....	115
439 Dodge Corporation, F. W. School Planning Handbook.....	184	486 Keystone View Company Teaching Aids.....	206	533 Sheldon Machine Co., Inc. Machine Shop Equipment.....	following page 146
440 Dolge Company, C. B. Liquid Detergent.....	131	487 Klopp Engineering, Inc. Coin Counter.....	120	534 Shwayder Brothers, Inc. Classroom Furniture.....	129
441 Don & Company, Edward Institutional Equipment.....	185	488 Kohler Company Plumbing Fixtures.....	98	535 Sjoström Company, Inc., John E. Library Furniture.....	182
442 Dudley Lock Corporation Locks.....	134	489 Krueger Metal Products Company School Seating.....	131	536 Sloan Valve Company Flush Valves.....	1
443 Dunham-Bush, Inc. Heating & Cooling Equipment.....	173	490 Lemlar Mfg. Company Window Louvers.....	112	537 Society For Visual Education, Inc. Projector.....	143
444 Du Pont de Nemours & Co., Inc., E. I. Vinyl Fabrics.....	171	491 Maico Company, Inc. Audiometer.....	following page 17	538 Spencer Industries Signs & Door Numbers.....	201
445 Duracote Corporation Fiberglass Fabrics.....	104	492 Majestic Wax Company Floor Maintenance.....	16	539 Spencer Turbine Company Floor Maintenance.....	122
446 Eastman Kodak Company Projector.....	111	493 Manley, Inc. Popcorn Machines.....	109	540 Stacor Equipment Company Drawing Table.....	196
447 Economics Laboratory, Inc. Dishwashing Products.....	27	494 Maple Flooring Mfrs. Assn. Maple Flooring.....	191	541 Standard Electric Time Company Clock & Program System.....	167
448 Equipment Mfg. Company, Inc. Classroom Wardrobes.....	170	495 Medart Products, Inc., Fred Gym Seats.....	11	542 Strong Electric Corporation Spotlights.....	142
449 Executone, Inc. Intercommunication System.....	95	496 Metalab Equipment Company Laboratory Furniture.....	102	543 Taylor Company, Halsey W. Fountain Coolers.....	179
450 Fenestra Incorporated Metal Building Panels.....	136, 137	497 Minneapolis-Honeywell Regulator Co. Temperature Control.....	152, 153	429 Tennessee Coal & Iron Division Structural Steel.....	144, 145
451 Fiat Metal Mfg. Co. Toilet Compartments.....	9	498 Mississippi Glass Company Diffusing Glass.....	22	544 Thonet Industries, Inc. School Furniture.....	210
452 Field Enterprises, Inc. Encyclopedia.....	31	499 Mitchell Mfg. Company Table & Bench Unit.....	128	545 Trane Company Heating & Cooling Equipment.....	36, 37
453 Finnell System, Inc. Floor Maintenance.....	87	500 Monroe Company Folding Tables & Chairs.....	190	546 U. S. Plywood Corporation Chalkboards.....	148
454 Fleetwood Furniture Company School Furniture.....	following page 80	501 Muecke Company, E. R. Choral Robes.....	150	429 United States Steel Corporation Structural Steel.....	144, 145
455 Garden City Plating & Mfg. Company School Lighting.....	148	502 Moore & Company, Samuel School Bus Products.....	following page 162	429 U. S. Steel Supply Division Structural Steel.....	144, 145
456 General Electric Company Projection Lamp.....	160	503 Myrtle Desk Co. School Furniture.....	204	547 Universal Bleacher Company Bleachers.....	35
457 General Precision Laboratory Inc. Teaching Aid.....	139	504 National Cash Register Company Accounting Machines.....	161	548 Uvalde Rock Asphalt Company Floor Covering.....	135
458 General School Equipment Company Classroom Furniture.....	29	505 National Cornice Works Food Carts.....	209	549 Vestal, Inc. Floor Maintenance.....	176
459 Gougher Keyless Lock Company, C. L. Locks.....	131	506 National Electrical Manufacturers Assn. Home Freezer Teaching Guide.....	113	550 Victor Animatograph Corporation Projector.....	189
460 Griggs Equipment, Inc. School Seating.....	187	507 National Piano Corporation Piano.....	178	551 Vonnegut Hardware Co., Von Duprin Division Fire & Panic Exit Devices.....	175
461 Grolier Society Inc. Encyclopedias.....	40	508 National School Furniture Company School Furniture.....	169	552 Walker-Turner Division Machine Shop Equipment.....	124
462 Gumpert Company, Inc., B. Institutional Food.....	Cover 2	509 National Super Service Company Floor Maintenance.....	162	553 Weber Costello Company Chalkboards.....	158
463 H & H Manufacturing Company Folding Table.....	174	510 Neubauer Mfg. Company Basket Racks.....	190	554 Webster-Chicago Corporation Tape Recorder & Phonograph.....	following page 130
464 Haldeman-Homme Mfg. Company Folding Table & Bench Unit.....	103	511 Nielsen Trampoline Company Trampolines.....	173	555 West Disinfecting Company Paper Towel Dispenser.....	101
465 Hampden Specialty Products, Inc. School Furniture.....	38	512 Oneida Ltd. Tableware.....	following page 18	556 Williams & Brower, Inc. School Furniture.....	187
466 Hardwood Products Corporation Sound Insulating Doors.....	180	513 Owens Illinois: Kimble Glass Company Subsidiary Glass Block.....	33	557 World Dryer Corporation Hand Dryer.....	201
467 Helms Company, H. J. Institutional Food.....	following page 18	514 Owens Illinois: Libbey Glass Glassware.....	119	558 Yale & Towne Mfg. Company Locks.....	19, 19
468 Heywood-Wakefield Company School Furniture.....	following page 18	515 Page Fence Association Wire Fence.....	168	559 Young Company, Paul O. Janitor Carts.....	192
469 Hillyard Chemical Company Floor Maintenance.....	181				

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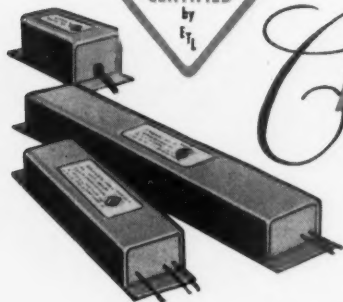
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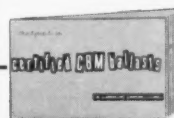


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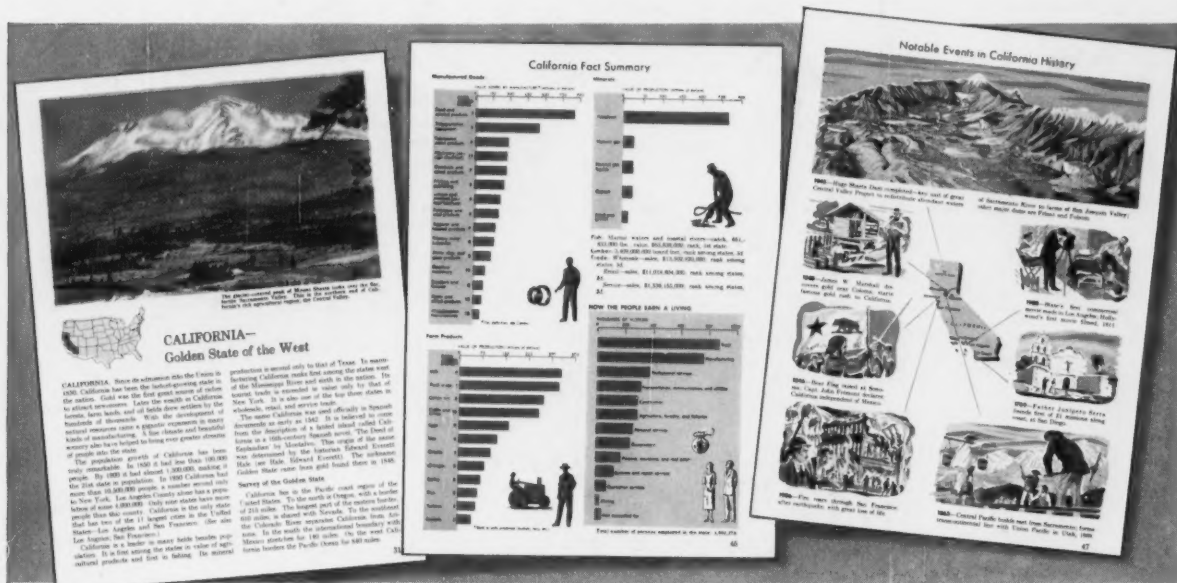
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